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REAL EXPENDITURE ON MANUFACTURED GOODS AND
PROCESSED AGRICULTURAL PRODUCTS BY THE
SOVIET PEASANTRY IN RETAIL SOCIALISED TRADE
1928, 1934-37

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A thesis submitted for the degree of Doctor of Philosophy
to the Faculty of Social Sciences, University of Glasgow

The Institute of Soviet and East European Studies
University of Glasgow

June 1989

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SUMMARY

The supply of manufactured goods and processed agricultural products to the Soviet peasantry during the Second Five-Year Plan (1933-37) has been a subject of great interest to scholars of collectivisation for over 50 years, but in-depth research has been hampered by a lack of reliable data on product flows, price levels and trends, and expenditure. This dissertation seeks to partially fill this gap by examining the Soviet peasantry's real expenditure on manufactured goods and processed agricultural products in retail socialised trade in 1934-37, using 1928 as a base year. It concentrates on the socialised sector because this was the main channel of supply of the major manufactured goods and processed agricultural products to the peasantry at this time, and expenditure is examined rather than physical product flows because reliable budget data on the former is available and the resulting calculation of price indices to deflate money expenditure levels also fills a gap in knowledge.

Chapter 1 of the study provides the general context for the analysis. It gives a brief survey of the retail trading system as it existed in 1928 and 1934-37, and then goes on to describe the pricing system and the structure of prices in both periods, and the extent to which trading outlets adhered to these. Particular emphasis is placed on 1934-37, because little is known about this period.

Chapter 2 describes the assortment of goods used as the basis for the study, and presents the weights attached to each good in the calculation of the price indices. It also analyses the problems associated with different weighting systems. Chapter 3 is concerned with the pricing of these goods. It presents the methods used to collect the price quotes and ensures that the goods quoted are comparable. It moves on to list the actual prices paid by the peasants for these goods in retail socialised trade in the period under discussion, and then gives the calculations of the annual average prices paid in both urban and rural sectors in each year.

Chapter 4 concentrates on the price indices. The methods for calculating the indices are presented, and the possible effects of the Soviet market situation on the accuracy of price indices in general are examined. Then the price indices are calculated and comparisons are made with urban sector studies for 1937 - the only other studies available. It is shown that the prices of the goods that were sold to the peasantry through retail socialised trade, and covered in this study, rose substantially in 1934-37, when compared to 1928. Using a sample of 27 goods common to all years in the study the index of prices paid by the peasantry in retail socialised trade (1928 = 100) was 542.4 in 1934, 684.6 in 1935, 661.4 in 1936 and 653.0 in 1937 using a Laspeyres formula; and 470.0 in 1934, 594.1 in 1935, 572.4 in 1936 and 564.7 in 1937 using a Paasche formula. The findings in this chapter support the view that the Soviet index of 536.0 for retail prices in all state and co-operative trade in 1937 (1928 = 100), may not be the gross underestimate it has been thought to be if it is assumed that a Paasche-type formula was used and that the sample used in this study is broadly representative of all goods in socialised retail trade. They also suggest that the Western studies of inflation in 1928-37 may have been distorted by basing their calculations on special increased prices in operation in Moscow, Leningrad, Kiev and Minsk from mid-1936 on.

Chapter 5 closes the study by examining the peasant budget studies for this period. It describes the method used to surmount the difficult task of compiling peasant budget data for 1928 and 1934-37 based on comparable regional samples. Then the findings on money expenditure on manufactured goods and processed agricultural products are given. The price indices presented in Chapter 4 are used to deflate the money expenditure data and obtain real expenditure levels. Finally, physical consumption norms in 1927/28 are presented to provide context and give an indication of the possible level that the peasantry's consumption of the goods in this study had reached in 1934-37. The chapter shows that real expenditure by the Soviet peasantry on manufactured goods and processed agricultural products in retail socialised trade reached a low point of around 30 per cent of its 1928 level in 1934, thereafter it staged a gradual recovery until it reached a peak of around 60 per

cent of its 1928 level in 1937, indicating a catastrophic fall in consumption of these goods by the Soviet peasantry in this period.

The following appendices are included in the study in order to detail the many steps in the analysis: Appendices A and B present the prices observed in retail socialised trade in 1928 and 1934-37 respectively; Appendix C examines the comparability of the goods in the study, and Appendix D calculates the weights to be attached to the regional belt prices in 1934-37; Appendix E gives calculations of the weights used to obtain the price indices, and Appendix F presents the calculations of the price indices themselves; Appendix G examines the comparability of the peasant budget studies in 1928 and 1934-37, and Appendix H presents calculations of the regional weights used in compiling budget data for 1928 that is comparable, on a regional basis, with that for 1934-37; finally Appendices I and J present the budget data for 1928 and 1934-37 respectively.

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Of course, all errors and opinions expressed in this study are entirely the author's responsibility.

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ABBREVIATIONS

The following abbreviations of the titles of statistical sources have been used:

- ARK-38 Arkhoibtorgotdel. Spravochnik o tsenakh i torgovykh nakidkakh, Arkhangel'sk 1938
- BK-34 TsUNKhU Gosplana SSSR. Byudzhety kolkhoznikov 1934 g., Moscow 1933
- BK-35 TsUNKhU Gosplana SSSR. Byudzhety kolkhoznikov 1935 g., Moscow 1934
- BNK Byulleten' Narkomsnaba
- BNP Byulleten' Narkompishcheprom (superseded BNK from issue No 25 1934)
- BVN Byulleten' Narkomvnutorga
- CHA Janet Chapman, Real Wages in Soviet Russia Since 1928, Cambridge 1963
- DRZ Dokhody ot realizatsii zerna, muki i drugikh produktov, Sbornik zakonodatel'nykh i instruktivnykh materialov, Moscow 1935
- EPS M Lifits, G L Rubinshtein, Ekonomika i planirovanie sovetsskoi trgovli, Moscow 1939
- ETI Z Bolotin, "Edinaya tsena i ocherednye zadachi tovarooborota", Planovoe Khozyaistvo, No 8, 1935
- GK Sbornik optovo-otpusknykh roznichnykh tsen: torgovykh nakidok na promprodtovary po Gorkovskomu Krayu, Vypusk I, Gorkii 1934
- GOR-34 Spravochnik tsen i torgovykh nakidok, Gorkii 1934
- GOR-36 Gorkovskii Krai potreboyuz. Kratkii spravochnik tsen, torgovykh nakidok, skidok i guzhnadbavok, Gorkii 1936
- ITS E Chernomordik, Indeksy tsentrosoyuza - osnovnye postroeniya, Moscow 1929
- JC-50 Janet Chapman, The Regional Structure of Soviet Retail Prices, Rand Corporation research memorandum, RM-425, 20 July 1950
- KHA Preiskurant kommercheskikh tsen na khlopchato-bumazhnye tkani. sukunno-sherstyanye tovary, trikotazhnye izdeliya i obuv' na 1933 god, Khabarovsk 1933
- KIR Sbornik optovo-otpusknykh, roznichnykh tsen i torgovykh nakidok na prom. i prod. tovary po Kirovskomu Krayu, Kirov 1936
- KOL TsUNKhU Gosplana SSSR. Sektor sovetsskoi trgovli. Kolkhoznaya trgovlya v 1932-34gg. Vypusk I, Moscow 1935
- LEN-33 Tseny, natsenki i instruktsii po tsenoobrazovaniyu na tovary normal'nogo fonda, deistvuyushchie v gosudarstvennykh i kooperativnykh organizatsiyakh Leningradskoi Oblasti, Leningrad 1933
- LEN-34 Otpusknye i roznichnye tverdye tseny na pishchevye tovary normal'nogo fonda, realizuemye v gor. Leningrade, Leningrad 1934
- LEN-36 Preiskurant edinykh roznichnykh tsen na khlopchato-bumazhnye tkani po g. Leningradu, Leningrad 1936
- LOB-37 Lenoblynutorgotdel. Preiskurant otpusknykh i roznichnykh tsen na rybu, rybotovary i rybnye konservy dlya Leningradskoi Oblasti [vklyuchaya Murmanskii Okrug], Leningrad 1937
- MAL A Malafeev, Istoriya tsenoobrazovaniya v SSSR (1917-1963), Moscow 1964

- MKO-34 Moskovskii Gorodskoi Otdel Snabzheniya. Spravochnik roznichnykh tsen i torgovykh nakidok na promyshlennye tovary po g. Moskve, Moscow, 1934
- MOS-33 Moskovskii Oblastnoi Otdel Snabzheniya. Spravochnik optovo-otpusknykh i roznichnykh tsen na prodovol'stvennye tovary po Moskovskoi Oblasti. Vyp. 1, Moscow 1933
- MOS-34 Spravochnik optovo-otpusknykh i roznichnykh tsen deistvuyushchikh v g. Moskve s 1 yanvarya 1934g. na prodovol'stvennye tovary, Moscow 1934
- MOS-35 Narodnyi Komissariat Vnutrennei Torgovli Soyuza SSR. Preiskurant edinykh roznichnykh tsen na nitki i nitochnye izdeliya, kommercheskikh tsen na khlopchatobumazhnye izdeliya i edinykh otpusknykh tsen na sherstyanye tkani gosudarstvennoi soyuznoi sherstyanoi promyshlennosti, Moscow 1935
- MOS-38 Moskovskii Oblastnoi Torgovoi Otdel. Preiskurant otpusknykh i roznichnykh tsen na rybu i rybotovary, Moscow 1938
- NOV-33 Otdel snabzheniya Zapsibkraiispolkoma. Sbornik tsen, natsenok i instruktsii po tsenoobrazovaniyu deistvuyushchikh po Zapsibkrayu, Novosibirsk 1933
- NOV-35 Otdel vnutrennei torgovli Zapadno-sibirskogo Kraevogo Ispolnitel'nogo Komiteta. Sbornik tsen, natsenok i instruktsii po tsenoobrazovaniyu deistvuyushchikh po Zapadno-sibirskomu Krayu, Novosibirsk 1935
- NOV-36 Zapsibkraivnutorg. Preiskurant edinykh otpusknykh i roznichnykh tsen na obuv' proizvodstva gosudarstvennykh predprivatii, promyshlennosti NKLP SSSR s 1 aprelya 1936 godu, Novosibirsk 1936
- ORT Otpusknye i roznichnye tseny i torgovye nakidki na promptovary, Leningrad-Moscow 1936
- PR-34 Price Regulations 1934? (A collection of regulations governing the setting of commercial prices for the whole of the USSR, probably published in November 1934. The correct title of the work is unknown. It is listed in the catalogue of the University of Glasgow, Scotland, under the title above).
- ROS-34 Spravochnik tsen, torgovykh nakidok i norm estestvennoi ubyli tovarov po Azovo-chernomorskemu i Severo-kavkazkomu Krayam, Rostov na-Donu 1934
- ROS-36 Azovo-Chernomorskii Kraevoi Otdel Vnutrennei Torgovli. Spravochnik tsen na prodtovary, Rostov na-Donu 1936
- ROS-37 Spravochnik tsen na promptovary, Rostov na-Donu 1937
- SBO Sbornik otpusknykh i roznichnykh tsen i torgovykh nakidok na prodovol'stvennye tovary, Leningrad-Moscow 1936
- SBP Sbornik preiskurantov i prikazov po tsenam i natsenkam (a probable successor to SPR)
- SMO Tseny i torgovye nakidki na promyshlennye i prodovol'stvennye tovary po Zapadnoi Oblasti, Smolensk 1935
- SO 'Statisticheskoe Obozrenie'

- SOR Narodnyi Kommissariat Torgovli Chuvashskoi ASSR. Sbornik otpusknykh i roznichnykh tsen i torgovykh nakidok na prodovol'stvennye tovary, deistvuyushchikh po Chuvashskoi Avtonomnoi Sovetskoi Sotsialisticheskoi Respublike, Cheboksary 1938
- SOT-35 Sovetskaya torgovlya, (statistical handbook), Moscow 1935
- SOT-36 Sovetskaya torgovlya 1935, (statistical handbook), Moscow 1936
- SOT-56 Sovetskaya torgovlya, Moscow 1956
- SOV-35 Sovetskaya torgovlya, Moscow 1935. A number of these statistical handbooks were published in 1935, all with the same titles.
- SPR Sbornik prikazov i rasporyazhenii Narkompishcheprom SSSR, (superseded BNP from 1936)
- SPT Spros i predlozhenie tovarov. Byulleten' byuro sprosa i predlozheniya tovarov Zapsprosbyuro/Zapoblvnutorga
- SRT-32 Spravochnik roznichnykh tsen i natsenok po Moskovskoi Oblasti, Moscow 1932
- SRT-36 Spravochnik roznichnykh tsen i torgovykh nakidok na promyshlennye tovary po g. Moskve, chast 1, 2, Moscow 1936
- SRT-39 SSSR Narodnyi Kommissariat Torgovli. Sbornik roznichnykh tsen i torgovykh nakidok [skidok] na prodovol'stvennye i promyshlennye tovary. Kniga I-ya. Prodovol'stvennye tovary, Moscow-Leningrad 1939
- SSS-27 Statisticheskii spravochnik SSSR 1927, Moscow 1927
- SSS-28 Statisticheskii spravochnik SSSR za 1928, Moscow 1928
- STA-34 Sbornik tsen i natsenok na promyshlennye i prodovol'stvennye tovary, Stalingrad 1934
- STA-38 Oblastnoi Otdel Torgovli Stalingradskogo Oblispolkoma. Sbornik tsen i natsenok i normy estestvennoi ubyli tovarov. Vtoroe dopolnennoe izdanie s izmeneniyami na 1 yanvarya 1938 goda, Stalingrad 1938
- SZR Sobranie zakonov i rasporyazhenii Raboche-Krest'yanskogo Pravitel'stva SSSR, otdel I
- TIF D I Kuchuloriya (ed), Tseny i torgovye nakidki na prom. i prodtovary, Tiflis 1935
- TIN Sevkraipotrebsoyuz. Tseni i natsenki. Kratkoe posobie po ischisleniyu prodazhnoi stoimosti tovarov dlya rabotnikov roznichnoi torgovoi seti na sele (location of publisher not indicated) 1935
- TGR TsUNKhU Gosplana SSR Tovaroorot za gody rekonstruktivnogo perioda, Moscow 1932
- TSN Tseny i natsenki v torguyushchikh sistemakh TsChO. Ofitsial'nyi byulleten' oblsnabotdela, oblpotrebsoyuza i GORTa
- TTR Tseny i i tsenoobrazovanie v roznichnoi torgovle. Sbornik postanovlenii i rukovodyashchie materialy po rabochemu snabzheniyu, Moscow-Leningrad 1934
- TUL A I Tulupnikov, Obshchestvennoe khozyaistvo - osnova zazhitochnosti kolkhoznikov [byudzhety kolkhoznikov], Moscow 1941

- UFA-33 Spravochnik tsen. Vypusk pervoi, Ufa 1933
- UFA-33a Spravochnik tsen. Vypusk vtoroi, Ufa 1933
- UFA-33b Dopolneniya i izmeneniya k spravochniku tsen, Ufa 1933
- UFA-37 Preiskuranty otpusknykh i roznichnykh tsen na promptovary shirпотреба, ustanovlennykh s 1 iyunya i 1 iyulya 1937 goda, Ufa 1937
- URA-35 Zapadno-Kazakhstanskaya Oblast' Oblpotrebsoyuz-Oblvnutorg. Potovarnye tseny i natsenki [dlya Zapadno-Kazakhstanskoi Oblasti] Ural'sk 1935
- URA-36 Zapadno-Kazakhstanskaya Oblast' Oblpotrebsoyuz-Oblvnutorg. Potovarnye tseny i natsenki [dlya Zapadno-Kazakhstanskoi Oblasti] Ural'sk 1936
- UST S P Sereda et al (eds), Universal'nyi spravochnik tsen, vyp. 3, Moscow-Leningrad 1928
- UZT S Kheinman, "Uroven zhizni trudyashchikhsya SSSR," in Planovoe Khozyaistvo No 8 1936
- VOR Tseny, natsenki i izderzhki obrashcheniya v torguyushchikh sistemkah TsChO, vypusk 2-i 1933 goda, Voronezh 1933
- VTs G Neiman, Vnutrennyaya trgovlya SSSR, Moscow 1935
-

A Note on Transliteration

Russian language sources are transliterated according to the system used by the journal Soviet Studies (see below). In cases where names or places have widely accepted English spellings, eg Moscow , the English variant has been used.

а	а	и	і	р	r	ш	sh
б	b	й	i	с	s	щ	shch
в	v	к	k	т	t	ъ	'
г	g	л	l	у	u	ы	y
д	d	м	m	ф	f	ь	'
е	e	н	n	х	kh	э	e
ж	zh	о	o	ц	ts	ю	yu
з	z	п	p	ч	ch	я	ya

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INTRODUCTION

For the past 50 years it has been generally accepted by most Western researchers that during the period of the Second Five-Year Plan (1933-37) the Soviet peasantry suffered great hardship as a result of the disruption caused by collectivisation and the state policies of goods supply and procurement of agricultural produce. However, the study of peasant living standards during this period has been a problematic one, due to the conspicuous absence of data that would enable an in-depth assessment to be made. Some Western researchers - such as Naum Jasny and Jerzy Karcz¹ - have pieced together data on agricultural output levels and marketings to give a general indication of the quantity of their produce that the peasants retained for their own use, and as a result we have a relatively good indication of the extent to which their consumption of agricultural produce fell in comparison with the pre-collectivisation year of 1928. Purchases of manufactured goods, however, have not been the subject of any in-depth and systematic research.

This study attempts to make a contribution to knowledge in this area by examining the Soviet peasantry's real expenditure on manufactured goods and processed agricultural products in retail socialised trade in 1934-37, using 1928 as a base year for comparison. The socialised sector - state and co-operative trade - has been chosen because it was the main channel of supply of manufactured goods and processed agricultural products to the peasantry in this period, and detailed and systematic data on the prices charged for these goods is available. It is believed that an examination of real expenditure in the socialised sector will not only be of interest to the researcher in itself, but will also be used as a general indicator of the change in real expenditure on these goods in all sectors of trade at this time (since purchases of manufactured goods in socialised trade accounted for over 80 per cent of the peasantry's purchases of these goods in all sectors). It also provides an analysis of the pricing system prevailing in 1934-37, the prices charged to the peasantry in urban and rural sectors and the level of inflation in relation to 1928. Furthermore, it seeks to correct a number of misconceptions concerning the level of prices in the urban sector in 1937 resulting from Janet Chapman's excellent work on real wages in the USSR.²

The method of analysis to be employed in this study is as follows: a picture of the pricing system and the level of prices charged to the peasantry in socialised trade in 1928 and 1934-37 will be compiled using a combination of pricing handbooks issued by local trading organisations in a number of areas of the USSR, centrally produced pricing handbooks which co-ordinated the regional data, decrees issued in central and local bulletins, secondary Soviet sources on retail trade, and Western research; then price indices using the Paasche and Laspeyres formulas will be calculated; next a series of peasant budget studies for 1928 and 1934-35 based on a broadly comparable regional sample will be calculated, and the data adjusted in line with the percentage of purchases of manufactured goods made in the socialised sector. Finally, the money expenditure data presented in the budget studies will be deflated by the price indices to give real expenditure levels.

The actual choice of specific manufactured goods and processed agricultural products was made on the basis of surveys of the typical "village assortment" of these goods consumed by the peasantry at this time, and also the availability of systematic pricing data for these goods - especially in 1934-37. As a result, 32 representative goods are included in the study. Whilst this sample of goods appears as rather limited for a study of real expenditure, it is believed that it will give an adequate indication of changes in price levels and real expenditure in this particular case, because the availability and range of goods were limited in this period and the peasants had basic requirements.

It is accepted that in a study of this kind the clearest and most detailed exposition of the statistical calculations needs to be made. Consequently, the bulk of the study will comprise statistical appendices tracing the various steps in the analysis, and the main text will pull together the findings presented in the appendices and put them in context. It is believed that this method will aid understanding of what is a complicated and problematic subject.

FOOTNOTES

- 1 See N Jasny, The Socialised Agriculture of the USSR. Plans and Performance, Stanford California 1949, pp 84-99; and J Karcz, The Economics of Communist Agriculture: Selected Papers, Bloomington Indiana 1979, pp 417, 455.
 - 2 J Chapman, Real Wages in Soviet Russia Since 1928, Cambridge 1963.
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CHAPTER I

The Retail Trading and the Pricing System in 1928 and 1934-37

This chapter first examines briefly the retail trading system over this period. It then moves on to a detailed description of the retail pricing system, with particular emphasis on 1934-37, since relatively little is known about this period. It goes on to describe the pricing structure in 1934-37 and how it affected the peasantry. Emphasis is given to this period because of the dual pricing policy that operated for most of that time. Finally, it examines to what extent these prices were adhered to in practice by the trading organisations.

1.i. The Retail Trading System

Before we embark on a description of the pricing system in this period, it is necessary to give a brief and general description of the retail trading system that prevailed, in order to provide some general context to the study. More detailed accounts of the system prevailing at that time are provided by Soviet and Western sources.¹

1928

In this year two markets existed side-by-side - the socialised sector, consisting of state and co-operative trade, and the private sector. The breakdown of the retail trade figures was as follows:

Table 1

Breakdown of Retail Turnover of the USSR, 1928
(m. rubles, current prices)

	State trade	% of total	Co-op. trade	% of total	Private trade	% of total	Total	%
1 Town	2020.7	19.3	5772.5	55.0	2701.5	25.7	10494.7	100
2 Village	388.1	8.3	3568.7	76.6	705.1	15.1	4661.9	100
3 1 + 2	2408.8	15.9	9341.2	61.6	3406.6	22.5	15156.6	100

Source: Sotsialisticheskoe stroitel'stvo v SSSR, Moscow 1935,
pp 552-53.

The table shows that the private sector accounted for less than 25 per cent of the total retail turnover of town and village, and approximately 15 per cent of village turnover. By far the largest proportion of retail trade was taken up by the co-operative sector. In the urban sector workers tended to be attached to the co-operatives, and administrative employees to state trade. In the village most of the peasants made their purchases through co-operative trade. They contracted to supply the state with agricultural produce, and in return the state would agree to make available to the co-operatives a specific quantity of manufactured goods.² Shortages, especially of manufactured goods, continued to exist in 1928. These were exacerbated in the village by the relatively low level of retail trade turnover of the rural sector. Consequently, the peasants made a fairly high proportion of their purchases in the urban sector (around 25 per cent, see chapter 3). Despite the shortages, however, there was no system of rationing throughout the USSR in this year (although Hubbard 1938, op. cit. p 30 does mention that a form of rationing was introduced in Leningrad in 1928, he accepts that the process of rationing proper began in 1929).

1934-37

In 1934 and 1935 a formal system of rationing was in operation in the retail trading system. Alongside rationing there was also free "commercial" trade in foodstuffs and non-foodstuffs and a non-organised collective farm market in agricultural produce that was, in effect, private trade. Except for a small quantity of foodstuffs supplied to the peasants under the otovarivanie system, rationing was mainly confined to workers in the urban sector. By 1934 the rationing system was already beginning to be supplanted by commercial trade in the urban sector; see chapter 3 .

Supply to the peasantry was mainly through co-operative trade, since in September 1935 co-operative trade was concentrated solely in the village and the urban co-operatives were taken over by Narkomtorg.³ Access to goods in the village was limited mainly by general supply policy rather than through a formal rationing system. The table below gives an idea of the relative imbalance between urban and rural retail trade:

Table 2

Urban and Rural Retail Socialised Trade, 1934-37, (m rubles, current prices)

	1934	1935	1936	1937
Urban	39.4	52.4	67.5	78.2
Rural	15.4	22.4	31.3	37.6
Total	54.8	74.5	98.8	115.8

Source: SOT-56 p 22

As we can see village turnover throughout 1934-37 was less than 50 per cent of that of the urban sector.

Pricing policy also had an effect upon village purchases since, because the rationing system and the low ration prices for the major manufactured non-foodstuffs were not applied in the rural sector, the peasants paid village prices "at the commercial level" up to late 1935 and early 1936; see below. This meant that they paid the commercial prices, which were extremely high, for their purchases.

As in 1928 the shortages in the village forced the peasants to make a significant share of their purchases in the town. As rationing began to be abolished and a unitary pricing system, differentiated by geographical regions and not by urban and rural sectors, began to be introduced purchases made by the peasantry in the urban sector, at least in the initial period, increased; see chapter 3 .

The unitary pricing system operated for an increasing number of goods from early 1935, and for all goods from early 1936. As noted, it was not differentiated by urban and rural sectors. Those mark-ups that were added to prices charged in the rural sector usually reflected the extra trading and transport costs associated with rural trade. During this period trade was open to all purchasers. Again, instead of rationing, supply was limited by decisions as to which outlets in which areas should receive goods. In some cases informal upper limits on quantities purchased did apply, but these appear to have been short-lived, and not of a general nature.⁴ Throughout this period the collective farm market continued to sell agricultural produce freely.

It should also be noted that in 1934-37, as well as the system of state and co-operative outlets, there were also other retail outlets that did not come directly under these headings, eg model department stores, all-union provision stores (combined under Gastronom and Bakaleya, from 1935), outlets of the Main Administration of Narkompishcheprom selling such goods as fish, conserves, bread, cereals and confectionery, and the torgy (autonomous state organisations at the head of a number of shops supplying an area). Apart from the torgy it appears that the others were almost exclusively organised in the urban sector.

1.ii. The Pricing System

1928

According to Janet Chapman⁵ official prices, ie retail prices in state and co-operative trade, "usually took the form of ceiling prices". In this case either a single ceiling price was established or they were differentiated by regions. Often the ceiling price for a specific area was determined by the state trade organisation for state shops, or by the local union of consumer co-operatives for co-operative shops. This meant, according to Chapman, that the price of a good could differ between cities in the same region, and could also differ between state and co-operative shops within the same city. It is likely that this was also the case with rural retail socialised trade.

It should also be noted that there were unitary prices for the whole of the urban and rural USSR (eg matches and cigarettes), which were not regionally differentiated and appear to have been charged in both state and co-operative trade.

1934-37

In the rationing period (1933-35) and the period after, the prices of nearly all of the necessities which comprised the average urban or rural shopping basket were regulated by the state. The following is the system observed:

Group 1

- a) Goods with unitary label prices determined by the Committee of the Commodity Fund and Retail Trade at the Council of Labour and Defence (hereafter referred to as KTF) were makhorka, cigarettes,

smoking tobacco, vodka and wheat vodka, natural tea, matches, playing cards and exercise books.⁶ No additions to the centrally determined prices of these goods were allowed, and trading organisations were instructed to make a deduction (skidka) from their receipts to cover expenditure. It appears that these prices were still centrally determined in 1936-37, but with some regional variations.⁷

b) Goods with hard delivery prices and hard retail prices (s tverdymi otpusknymi i roznichnymi tsenami) determined by the KTF were meat and meat products, vegetable oils, margarine, sugar, salt, flour, baked bread, paraffin, slaughtered fowl, macaroni, groats, butter, dairy products, non-alcoholic drinks and beer.⁸ This list probably includes conserves of various types. The prices of these goods were centrally determined and the difference between the delivery price and the retail price was retained by the trading organisation to cover expenses. In addition the trading organisation could levy an extra charge for cartage (avtoguzhevaya nadbavka or guzhnadbavka) for transporting the good further than a distance of 7km from a railway station or wharf (cartage within a 7km radius was accounted for in the difference between the delivery and retail prices). In some cases, eg sugar and paraffin, the prices of these goods differed substantially between the urban and rural sectors. There was also regional differentiation of the prices of some goods, eg salt. In general, however, there was remarkable uniformity in the prices of these goods in the regions included in this study.

With the introduction of unitary prices in 1935 the prices of these goods were still centrally determined, but a system of regional variation was introduced, with the number of belts varying between goods. For most of these goods an extra charge for cartage was not levied, but some, eg salt, were subject to the extra charge.⁹

c) Goods with hard retail prices and hard deductions from them (s tverdymi roznichnymi tsenami i tverdymi skidkami k nim) determined by the KTF, were household soap, toilet soap, rubber galoshes and footwear, thread, knitwear, factory-produced leather footwear and canvas footwear,¹⁰ craftsman-produced footwear made of cow hide, cotton cloth, woollen cloth, sewn goods except: i) quilted overcoats dearer than R 160 (changed from R 125 in 1934);¹¹ ii) overcoats with fur collars; iii) ladies' and gents' suits dearer than

R 80 (changed from R 65 in 1934);¹² iv) silk underwear and ladies' underwear made from chiffon and lawn; v) ladies' silk dresses; and vi) headwear, perfumery and cosmetics, and linencloth except: table items, narrow sheets, at prices higher than R 1.20 metre, (increased to R 2.30/metre in 1934), bed sheeting at prices over R 2.00/metre (increased to R 3.50/metre in 1934), table cloths 120 cms wide at prices over R 2.50 (increased to R 4.80 in 1934), white and double Kamchatka type towels.¹³ It is assumed that the prices listed above were delivery prices.¹⁴ The retail prices of these goods were centrally determined, the factories producing them were empowered to calculate the delivery price by making a standard deduction from the listed retail price. The selling organisation would cover its costs by retaining the difference between the established retail price and the delivery price.¹⁵ Cartage costs up to a distance of 40km from a railway station or wharf were covered by the deduction outlined.

Examination of the prices of these goods in 1933-35 shows that there were substantial differences between urban and rural prices, but there was no regional differentiation noted.

After the phasing out of rationing in 1935 and 1936 the prices of these goods were still centrally determined, and there were still the same charges for cartage, but the urban/rural price differential was substantially reduced and some small regional differentiation was introduced.¹⁶

d) Goods with hard delivery prices and hard extra charges to them
(s tverdymi otpusknyimi tsenami i tverdymi nakidkami na nikh)
determined by the KTF in 1934-35 were: haberdashery, harnesses and saddlery goods (factory produced), fur goods, sporting goods and china and glass (regulated) goods.¹⁷ Extra charges for the defrayment of cartage expenses varied between these goods, eg in the case of haberdashery these expenses were included in the extra charge allowed, whereas in the case of saddlery goods an extra charge was levied in line with that laid down in the relevant pricing handbook. It appears that the retail prices of these goods varied between regions and between town and country in 1934-35.¹⁸ For 1936-37 different methods for establishing these prices were implemented, for

example there was one price belt for saddlery and harness goods, no urban/rural differential and no applicable cartage allowance, whereas for china and glassware there was one rural and two urban price belts and an allowance for cartage.¹⁹ It appears that the delivery prices were set centrally and the officially set extra charges varied between the belts.

Group 2

Goods with retail prices and extra charges established by krai and oblast executive committees or councils of people's commissars of republics not divided into oblasts in 1934-35, were potatoes, vegetables, milk and cheese from central funds.²⁰ One source²¹ says that these were goods resulting from decentralised procurements, it also includes eggs under this heading, which may be peculiar to this particular area. It is possible that in later years the prices of such goods were set locally.²² There is no evidence available on the existence of urban/rural price differentials in 1934-37. It is known, however, that in 1934-35 transport expenditure was included in the retail price.²³

Group 3

Goods with prices and extra charges set directly by the trading organisations in 1934-35 were: honey, confectionery, spirit drinks apart from vodka, tea surrogates and coffee, cotton scarves (of woollen model), silk cloth, flax cloth (except that listed earlier), wadding of various types, sewn goods (except those listed earlier), headwear, fur and feathers, footwear (apart from those listed earlier), leather goods and semi-processed hides, metal dishes and household goods, agricultural inventories, metal hardware and other hardware, cast iron moulded goods (ferrous and enamelled), weighing inventories, lacquer paints, aniline dyes, other chemical goods, furniture and display items, goods made from wood waste, carting goods, saddlery items (craftsman produced), travelling items, window glass, chalk and lime, axle grease, metal lamps, medicaments, paper and office items (except exercise books), games, photographic equipment, radio equipment, electrical items (except those with label prices), visual aids, other manufactured goods not listed in previous sections, other foods not listed in previous sections.²⁴ Musical instruments, clocks and watches were added to Group 1 in early 1935.²⁵

It is known that the cost of cartage from railway station or wharf was to be included in the final retail price of these goods,²⁶ but it is not known whether there was an urban/rural price differential.

It appears that in 1936-37 there may have been rural/urban price differentials and extra cartage charges for some of these goods, eg glass and crockery in Azov-Black Sea Krai in 1937 had these differentials and charges.²⁷ It is not known how extensive this was.

1.iii. The Pricing Structure

Having examined the system used to set prices, we now examine their structure. We shall concentrate on the structure in 1934-37, because little is known about this period, and the structure in 1928 was straightforward - prices in state and co-operative trade were extremely close to each other in most cases, and, as far as the peasantry was concerned, there was no discriminatory pricing and rationing.

In 1934-36, however, the pricing structure consisted of the following elements:

Normal fund prices

These prices were charged for a variety of goods in 1934-36. It is clear from the pricing handbooks and literature on retail trade at this time that the lowest "normal fund" (normalnyi fond) prices were charged for rationed goods, at least in the urban sector.²⁸ From January 1933 onwards normal fund prices of the major manufactured non-foodstuffs were only charged in the urban sector. These goods were also rationed and were only available to special categories of the population, which excluded the peasantry. In the rural sector prices for the major manufactured goods - cotton cloth, wool cloth, knitwear, footwear, thread and toilet soap - were charged at the level of "existing commercial prices" (na urovne deistvuyushchikh kommercheskikh tsen).²⁹ In practice this meant that full commercial prices were charged. For household soap differential normal fund prices were charged in the urban and rural sectors. The price in the rural sector was situated between the low urban price and the much higher commercial price.³⁰

The normal fund price for paraffin was also differentiated between urban and rural sectors, the rural price being around 40 per cent more expensive than that for the urban sector; see section 21 of Appendix B .

For flour, bread, groats and pulses, meat, butter and vegetable oils there appears to have been no urban/rural differential between normal fund prices from 1934 on, except where extra charges were added to goods sold in rural areas to defray cartage costs. It appears that differentiation was unnecessary, since sales of such goods in the rural sector were extremely limited and only selected groups were allowed to buy under the formal rationing system; see section on preferential prices below.³¹

Differential normal fund prices were charged for sugar in the urban and rural sectors in 1934-35. The lowest price was that charged in the urban sector. The rural price was around 175 per cent of the urban price. This was followed by the commercial or free-sale price; see section 10 of Appendix B . On top of this there were locally imposed extra cartage charges levied on goods sold in outlets situated a stipulated distance from the nearest railway station or wharf.³²

It appears from the handbooks that there was remarkable uniformity between normal fund prices charged in most regions of the USSR in 1934 and 1935.³³ The differentiation that did occur in these years tended, in most cases, to be confined to the charging of differential prices in mountainous areas. Only in the case of salt and paraffin has there been any solid evidence of regional differentiation of pricing which affected a majority of areas of the USSR. It is also possible that the normal fund price of fish may have been differentiated according to the prices charged by the catching organisation, but insufficient information has been gathered to enable an accurate description of the pricing of this good to be made.

Label prices

Label prices (etiketnye tseny) for makhorka, cigarettes, smoking tobacco, vodka, natural tea, matches, playing cards and exercise books appear to have been in operation at least in 1933-35, and most probably in 1936-37.³⁴ Label prices applied to all purchasers, regardless of group or area,³⁵ but there were also commercial sales of some of the

goods listed above; eg makhorka and tea, see below . The full range of these goods was not always available in rural shops, eg in 1933 the range of teas available was much smaller than that in urban retail outlets.³⁶

Average increased prices

At the end of 1931 additional "commercial" outlets - see below for a description of the commercial system - which sold goods at average increased prices (srednye povyshennymy tseny) were opened in workers' districts. These prices applied mainly to agricultural products (milk, vegetables, berries and fish), and were "significantly lower" than commercial prices for the same goods, according to one author.³⁷ There is also evidence that these prices were fairly close to commercial prices for some goods, eg the commercial price for refined vegetable oil in 1932 was R 5.00/litre in Moscow Oblast and the average increased price for the same good was R 4.50/litre; the difference between the commercial and average increased prices for millet was ten per cent, and that for first sort vermicelli - 9.3 per cent.³⁸ It appears that these prices were designed to apply to urban workers and were of a purely temporary nature. Although it has sometimes been thought that these prices operated throughout the rationing period they were, in fact, abolished in February 1933.³⁹

Commercial prices

In 1934-36 various manufactured goods and foodstuffs were sold at commercial prices, which were well in excess of the "normal fund" ration prices. The commercial prices were hard retail prices set centrally. Local trading organisations could not change them, except under prescribed circumstances.⁴⁰ It also appears that commercial prices for most of the major manufactured goods (cloth, clothing, footwear, knitwear, tea, makhorka, vegetable oil, bread, flour and groats and pulses) were unitary for the whole of the USSR.⁴¹

An extra charge for the defrayment of local cartage costs was allowed to be added to commercial prices, but in most cases this covered transport from a railway station or wharf lying well over 30km from the retail outlet - a majority of outlets were situated within this distance, see Appendix B.⁴² For distances shorter than this, transport costs were included in the trading outlet's allowance from the sale of the good.

Price lists of goods of the commercial fund were produced centrally in most cases, and trading outlets were instructed to sell the good at the officially set price (unless an extra charge to defray transport costs was to be made), and to make either a deduction (skidka) from receipts, or an addition (nakidka) to the wholesale price to reach the officially set commercial price.⁴³ However, some goods did have commercial prices that were not laid down in the lists. These included footwear produced by handicraft industry (excluding footwear made from cow hide);⁴⁴ sewn goods made from non-planned raw materials;⁴⁵ and knitwear produced by the handicraft industry.⁴⁶ For these goods instructions were laid down on calculating a retail price, based on the wholesale price, which would include the necessary budget price addition (byudzhetnaya natsenka) and would be at a "commercial" level. It is possible that the final retail prices could have differed markedly from those for similar goods in the centrally produced lists. Unfortunately, no information on either the wholesale or retail prices of these "commercial" goods has been uncovered. Given the increasing importance of state industry throughout this period, and the lack of information on these prices, this study has concentrated on the official commercial prices as determined by the central authorities.

One author has noted that in the early 1930s the practice of establishing prices by the plant was widespread, and that this resulted in different prices being charged for the same good.⁴⁷ However, in the case of commercial prices central control was fairly close (except in the case of the handicraft goods and certain goods made from non-planned raw materials). The lists included price information for various trusts, and legislation on village pricing "at the commercial level" suggests that commercial price lists for such goods as cloth, clothing, knitwear and footwear, applied to the village.⁴⁸ So far, no difference between village prices at the commercial level and commercial prices for the same good has been found.

Alongside commercial trade state shops freely selling foodstuffs at prices in excess of those for rationed goods were opened from 1933 onwards. An examination of the pricing data and literature on trade at this time shows that the prices charged in these stores were the same as the commercial prices of these goods existing at this time; see section on setting annual prices. So far no instance of

differentiated commercial and free sale prices for the same good in the same period has been uncovered. With the exception of butter, and possibly fish, there does not appear to have been regional differentiation of these prices.⁴⁹ It appears that there was no commercial trade in paraffin, matches and cigarettes. Commercial prices were also charged for goods sold to the peasants by state outlets in collective farm markets. These outlets were designed to stimulate sales of produce in collective farm markets.⁵⁰

Prices in universal stores

From the rationing period to that of unitary prices some universal stores charged prices which differed from those in either general trading outlets or special outlets such as commercial stores.⁵¹

However, there is little or no information on these prices, and the relative unimportance of sales in universal stores, as far as purchases made by the peasantry are concerned, means that this will not hamper the study greatly.

Preferential prices

In 1934-35 a system known as "otovarivanie", a system similar to barter, was practised when procuring grain and technical crops.⁵² It appears that the suppliers of specified agricultural produce received rationed supplies of foodstuffs and manufactured goods in exchange.⁵³ Some authors have noted that these goods were sold at preferential prices (1'gotnye tseny),⁵⁴ and the peasants were allowed to buy manufactured goods up to a proportion of the value of their deliveries. According to Hubbard these manufactured goods were sold to the peasants at existing "normal fund" prices,⁵⁵ but he appears to have confused this with the system of purchases of grain by consumer co-operatives in the early 1930s since he refers to goods being purchased in multiples of the value of the grain supplied, which was the system for these purchases and not for otovarivanie.⁵⁶ Another source also says that as far as the sale of manufactured goods in the countryside was concerned, in the rationing period the government had little opportunity to increase the supply of goods to the countryside above that for special purposes - mainly otovarivanie of procurements.⁵⁷ If this were so then it would render the charging of special rural prices at the commercial level superfluous, since, according to Hubbard, normal fund prices were being charged for manufactured goods traded in

otovarivanie. When describing the pricing structure at this time many Soviet authors concentrate on the special rural prices in operation and do not even mention the system of preferential prices, implying that either their research is incomplete or that these preferential prices were not a major component of the system.⁵⁸ However, another Soviet author does note that the system of otovarivanie of procurements at preferential prices was in operation and that "trade at increased prices in rural areas was the basic form of trade of manufactured goods" in this period.⁵⁹

It appears from a study of the handbooks that prices charged in rural areas for the important manufactured goods - cloth, clothing, knitwear, footwear and thread - were at the commercial level. There are no cases of differential prices for these manufactured goods being charged in the village in 1934-37 and since the handbooks are instructions to the trading organisations on prices to be charged in geographical areas it would appear that these rural prices applied. Evidence of this is provided by a Kursk Oblast trade journal, which shows that felt boots (valenki) supplied to the peasants in exchange for purchases of grain were sold at commercial prices.⁶⁰ It is possible that the right to buy was the advantage offered in the case of these manufactured non-foodstuffs, and preferential prices may have applied to other goods.⁶¹

A possible key to this problem is provided by the pricing of foodstuffs in the handbooks. In the case of flour, bread, groats and pulses, milk, meat, butter, oils and tea the handbooks refer to normal fund prices without stipulating urban or rural sectors (except in the case of bread in early 1933 when a differential normal fund price may have applied).⁶² It was probably the case that the peasants were charged the normal fund prices for foodstuffs supplied by the state in the otovarivanie system.⁶³ The preferential aspect of these prices would lie in the fact that the peasants were allowed to purchase goods at ration prices, which were usually charged to urban dwellers, as opposed to the commercial prices or market prices that the peasants had to pay in the urban sector. This would also mean that the peasants were able to obtain a limited range of foodstuffs that were not in great supply in the rural sector.⁶⁴ It is assumed that this limited range of foodstuffs did not include meat and eggs because, as noted, these were reserved almost exclusively for industrial workers. Nevertheless,

sales of such goods were made in the village. It is possible that these were sold to specially favoured categories of rural dwellers such as railway workers, workers and employees of state farms, tractor drivers etc. The level of these sales was extremely low, eg sales of meat and eggs in rural state and co-operative trade in 1934 were R 145.2m out of total sales of foodstuffs of R 7,634.6m⁶⁵ indicating that such goods did not figure strongly in sales to the peasantry.

To sum up, it has been assumed that rural sales of cloth, clothing, footwear, knitwear and thread under the otovarivanie system were at the commercial level; and rural sales of bread, flour, groats and pulses, meat and dairy products were at normal fund prices (with small additional charges for the defrayment of cartage costs - see the section on actual prices). For those goods with differential normal fund prices, eg sugar and household soap, it has been assumed that the village price applied in the otovarivanie system. It should also be remembered that the system was in operation only in 1934, and part of 1935 (the phasing out of rationing for most foodstuffs in that year appears to have been accompanied by the gradual phasing out of otovarivanie).

Torgsin prices

Goods sold under Torgsin, or the Torgovlya s inostrantsami (Trade with foreigners) system, were given special prices which could only be paid in gold or foreign currency. No information has been found so far on the prices of goods sold through this narrow channel of supply.⁶⁶

Unitary prices

In 1935-36 the rationing system and the accompanying normal fund, commercial fund and preferential prices were gradually abolished. In their place a system of unitary belt prices (ediniye poyasnye tseny) for most goods sold to all comers in state and co-operative trade was introduced throughout the USSR. The prices were differentiated by regional belts, and the number of these belts ranged from three for household soap to eight for flour, groats, pulses and bread (there were also goods with a single price for the whole of the USSR, eg tea and thread, and paraffin had two regional belts throughout 1934-37).

The differential between the prices in the belts could be quite substantial, eg the Belt I price of rye flour in January 1935 was R 1.70/kilo, and the Belt VIII price - R 3.50/kilo. In general, the regional pricing pattern appears to have been based on differences in costs of production, distribution and transport, but other factors, such as questions of administrative simplicity, the desire to encourage or discourage the production of a particular good, the dislocation of demand and supply following population shifts and historical differences in retail price levels, also influenced the relative prices.⁶⁷

The urban/rural price differential within the price belts was, for the most part, quite small, and probably reflected the difference in retail trading and transport costs between these two sectors (rural prices were slightly higher). There is no evidence of a unitary pricing policy that discriminated against a particular sector. The chronology of the introduction of unitary prices for the goods in this study was as follows: January 1935 - flour, groats, pulses, and bread; April 1935 - thread; May 1935 - vodka and makhorka; June 1935 - tea; July 1935 - woollen cloth; August 1935 - knitwear; September 1935 - soap; October 1935 - oils, sugar, salt and fish; April 1936 - cotton cloth and footwear; matches and cigarettes appear to have had constant label prices in this period.

1.iv. Pricing Irregularities

The study has looked at official retail prices as set down in the handbooks. It is necessary now to assess to what extent the trading organisations adhered to these prices, and how extensive the breaking of the regulations was, since this will directly affect the accuracy of our findings.

It appears from a survey of the literature that the practice of charging different prices to those officially laid down was common in the period of the worst shortages (1931-33). For example, one author talked of price discrepancies acquiring a "mass character" in 1932, and quoted a Workers' and Peasants' Inspectorate survey which showed that 30 per cent of researched Tsentrosoyuz co-operative stores were breaking the price regulation.⁶⁸ Another noted that in 1931 "speculative tendencies" had strengthened in some areas of trade.⁶⁹ However, even in earlier periods there were quite extensive examples of breaking of the regulations. For example, in 1929 there were cases of consumer co-operatives increasing prices illegally in order to

enhance their profitability, and Moscow consumer co-operatives were said to have increased the prices of goods not regulated by Narkomtorg and sold in February and March 1929 by 30 per cent to make extra profits.⁷⁰

In 1931 and 1932 efforts were made to increase control over pricing. As well as the formation of the Committee of Prices at the Council of Peoples' Commissars, the price inspectorate at the Workers' and Peasants' Inspection was also established.⁷¹ Officially set extra trading charges were extended to include basic transport expenditure, hard lists of delivery prices were introduced, conventional prices for goods produced by handicraft co-operatives began to be applied in 1933 and in the same year the practice of publishing systematic pricing handbooks by regional trading departments became more widespread.⁷²

By 1934 it appears that the regulations governing price setting had been systematised, most of the regional differences in prices had been eliminated, eg bread prices, and punishments for breaking the regulations widely publicised (most of the pricing handbooks included examples of current legislation concerning rule-breaking, and often examples of punishments meted out were also given, most probably as a warning). This, combined with the stabilisation of markets which accompanied preparations for the elimination of rationing in 1934 and 1935, leads one to assume that the incidence of speculative tendencies in state and co-operative trade must have declined. This seems to have been the case judging by the literature on trade in the mid-1930s. A definite fall in the number of complaints appearing in trade journals can be observed.

Despite this, however, there were still examples of illegal price rises in this period. For example, an inspection of pricing in August 1934 (inspection organisation not listed) showed that for every 100 outlets surveyed there were 33.5 cases of exceeding official prices and extra trading charges. By January 1935 this had fallen to nine cases.⁷³ The same source says that there were also cases of trading outlets undercharging for goods. It is assumed that the breaking of pricing regulations continued in 1935-37, but on a much smaller scale.⁷⁴

The methods used to break the regulations, at least in the early 1930s, were varied and often ingenious. For example, higher prices were charged even for goods with centrally set label prices which were visible to the purchaser, extra charges were levied on the total bill for a good rather than on the delivery price, imaginary extra charges were levied in cases where deductions should have been made and low-priced normal fund goods were sold as relatively high-priced commercial fund goods. Even those organisations which should have been policing the pricing system, such as local party bodies and soviets, were actively engaged in increasing prices - even to the point of issuing official directives.⁷⁵ There were also cases of consumer co-operatives selling deficit manufactured goods at speculative prices on the collective farm market, bartering goods on these markets and even buying produce cheap on the markets and reselling it at inflated prices.⁷⁶

Unfortunately, it has proven difficult to quantify the effect of these practices upon prices charged in state and co-operative trade. It appears, however, that the effect of these practices would lead to the comparison understating to a certain extent the increase in prices in relation to 1928.

FOOTNOTES

- 1 See L E Hubbard, Soviet Trade and Distribution, London 1938
MAL; EPS; VTS; M M Lifits, Ekonomika sovetskoi trgovli,
Moscow 1956; G A Dikhtyar, Sovetskaya trgovlya v period
postroeniya sotsializma, Moscow 1961.
- 2 See Hubbard 1938, op. cit., p 32.
- 3 Dikhtyar 1961, op. cit., p 400.
- 4 The decree introducing the free sale of fish goods in 1935
stipulated a 3 kilo norm for fish and 1 kilo for herring,
SZR No 51, October 1935, p 421.
- 5 CHA p 15.
- 6 TIN pp 9 -10, GOR-34 pp 3-6.
- 7 JC-50 pp 12-15.
- 8 TIN pp 10-11, GOR-34 pp 3-6.
- 9 JC-50 pp 12-15.
- 10 Up to March 1934 the latter had to be no dearer than
R 25.00/ pair, SMO p 10.
- 11 SMO p 10.
- 12 SMO p 10.
- 13 SMO p 10.
- 14 GOR-34 pp 3-6.
- 15 TIN p 12.
- 16 JC-50 pp 12-31.
- 17 TIN p 12.
- 18 LEN-33 p 75, VOR p 65.
- 19 JC-50 pp 13-14.
- 20 GOR-34 p 5, SMO p 10.
- 21 TIN pp 12-13.
- 22 JC-50 p 12.
- 23 TIN p 13.
- 24 GOR-34 p 5.
- 25 TTN-35 p 11.
- 26 TIN p 14.
- 27 ROS-37 pp 279-82.

- 28 MAL p 168. Another author refers to the "dual" price system in operation at this time, ie normal fund prices and commercial prices, see G A Dikhtyar, Sovetskaya trgovlya v period post-roeniya sotsializma, Moscow 1961, pp 383, 385.
- 29 PR-34 pp 3-4.
- 30 Household soap with a 40 per cent fat content had an urban normal fund price of R 1.20/kilo in Western Oblast in January 1935, the village normal fund price for the same soap was R 2.50/kilo, and the commercial price - R 3.00/kilo, SMO p 31.
- 31 In 1934 sales in the rural sector of flour, groats, pulses and macaroni goods, bread and bakery products, butter, vegetable oils, salt and meat and meat products, were R 1,456.5m out of total sales of foodstuffs in state and co-operative trade of R 7,634.6m (over half of this being accounted for by vodka). Sales of the same goods in the urban sector in 1934 came to R 11,295.5m out of total sales of foodstuffs in state and co-operative trade of R 23,817.2m, SOT-36 pp 68, 70 (the urban figures include sales of commercial and free-sale goods).
- 32 This usually affected rural areas to a greater extent than urban areas, because towns tended to be situated near railways and waterways, whereas the villages were more isolated.
- 33 For example, TTR pp 55-75 lists unitary prices for the USSR of bread, flour, rice, meat, sugar and vegetable oil. It also gives the unitary prices, divided into regional belts, of salt and paraffin.
- 34 TIN p 9, LEN-33 p 20. CHA p 89 shows that Moscow and USSR prices for cigarettes, makhorka and matches were identical in 1936 (after the abolition of rationing). JC-50 pp 12-15 indicates that in 1936 there were single price belts for cigarettes, matches, notebooks and vodka, with some minor regional exceptions, and the price of tea was uniform for the whole of the USSR except for Far Eastern Krai.
- 35 L Gatovskii, G Neiman, V Nodel (eds), Ekonomika sovetskoi trgovli, Moscow-Leningrad 1934, p 403.
- 36 LEN-33 p 30.
- 37 Sh. Turetskii, "Puti planirovaniya tsen" 'Planovoe Khozyaistvo', No 3, 1936, p 131.
- 38 SRT-32 pp 61, 71, 124.
- 39 BNK No 8 1933 pp 3-6. Referred to by A Baykov, The Development of the Soviet Economic System, Cambridge 1946, p 236, as "temporary intermediate prices".
- 40 TIN p 14.
- 41 NOV-35 p 33 says commercial prices were unitary for the USSR. See also PR-34 p 3. So far commercial prices divided into belts have been found for sugar (PR-34 p 143), and possibly for butter (I Malishev, "Voprosy razvitiya kolkhoznai trgovli", 'Planovoe

- Khozyaistvo', No 4, 1936, p 119). BNK No 21, 1932, p 5, indicates that in 1932 it was decided to levy extra charges to unitary commercial prices in remote areas and those situated far from a railway station or wharf.
- 42 PR-34 p 8.
- 43 There is some confusion in the literature about this. PR-34 pp 9-15 refers to extra charges (nakidki) for cotton and wool cloth, knitwear, household soap and toilet soap, cotton thread, sewn goods and footwear, and a deduction (skidka) for galoshes in five regional belts of the USSR (except footwear, which had six). TIN p 12 explains this as follows: for deductions, the factory supplying the good deducted the laid down percentage from the final retail price and supplied the good to the trading organisation. The good was sold at the hard price and the difference between the whole-sale and retail price was retained by the trading organisation. In the case of galoshes the trading outlet made the deduction from the retail price after the sale. ROS-34 pp 88, 97, 107 refers to the method of defraying trading costs on the sale of commercial goods such as cotton and wool cloth and footwear by making a "deduction". This is also the case in SMO pp 32,35, 42, 46 for household soap, cotton thread and footwear. As explained above this is in effect what it was, even though in the original resolution it was described as an "addition".
- 44 LEN-33 p 74.
- 45 ROS-34 p 138.
- 46 SMO p 50.
- 47 JC-50 pp 30-31.
- 48 LEN-33 pp 66-67, 71, 73-74.
- 49 Data from Western Oblast and the Georgian SSR indicates that there may have been a unitary commercial price list for fish in operation in 1934-35, see SMO p 76, and TIF p 77. LEN-33 pp 50-53 presents a normal fund price list for fish goods which relates purely to fish caught by one catching organisation - Sevrybsbyt.
- 50 BNK No 21, 1932, p 5.
- 51 Turetskii, 1936, op. cit. p 134, points to the existence of these prices during the rationing period. SBP No 11 May 1937 pp 1-2, lists differential price reductions in the June 1937 price change, relating to universal stores with increased prices (univermagi s povyshennymi tsenami) and the general trading network (v obshchei torgovoi seti).
- 52 Dikhtyar, 1961, op.cit. p 390.
- 53 Whereas Dikhtyar, 1961, loc. cit., refers to otovarivanie for technical crops, DRZ p 5 also refers to supplies of grain. Both sources refer specifically to supplies of bread by the state, which suggests that this was the main component of otovarivanie at this time.

- 54 A Smirnov, Ekonomicheskoe sodержanie naloga s oborota, Moscow 1963, p 206; Materialy Narkomsnaba SSSR k otchetu pravitel'stva VI s'ezdu sovetov, Moscow 1931, p 27.
- 55 Hubbard pp 170-71.
- 56 V A Nodel, Kolkhoznaya trgovlya khlebom, Moscow 1934, pp 25-26, shows that purchases of grain by the consumer co-operatives were made at prices higher than those for procurements; the peasants were able to buy manufactured goods to the multiple value of these purchases at state prices.
- 57 Dikhtyar, 1961, op. cit. p 403.
- 58 M M Lifits, Ekonomika sovetskoi trgovli, Moscow 1950, p 92, MAL p 146.
- 59 Smirnov op. cit. p 204.
- 60 Torgovoi byulleten'. Kurskii oblnutorgotdel, oblpotrebsyuz i oblGORTa No 1-4 1934, p 3.
- 61 At this time the shortage of goods led to speculative tendencies and the practice of reserving goods for special consumers or switching them between commercial and normal funds, see Itogi razvitiya sovetskoi trgovli ot VI k VII s'ezdu Sovetov SSSR, Moscow 1935, pp 46-49, and Ya. Leibman, "Za dal'neishee razvertyvanie sovetskoi trgovli", Bol'shevik No 21, 15 Nov 1931, pp 67-69.
- 62 MAL p 190 gives differential price increases for bread on 20/3/33.
- 63 SRT-32 pp 38-41, does give a price for vegetable oil (unrefined) supplied to collective farmers who contracted to supply oil seeds in Moscow Oblast in 1932. In this case the price of the vegetable oil was R 1.25/litre, whereas the normal fund price charged in the rural sector was R 1.30/litre. The closeness of these prices gives some backing to the assumption that the preferential prices for foodstuffs were the same as normal fund prices. MAL p 180 also notes that after normal fund prices for bread, flour, groats and pulses were abolished in 1935 only deliveries of sugar beets and oil seeds were subject to otovarivanie, and preferential prices were charged for sugar and oils only. This also lends support to the assumption that the preferential prices charged were normal fund prices. It is clear from Dikhtyar op. cit. p 390 that foodstuffs such as bread were supplied to the peasants under otovarivanie in exchange for deliveries of technical crops such as flax, cotton and tobacco. This would seem logical since in most cases the suppliers of technical crops did not produce foodstuffs in great quantity and would need food supplies from the state.

- 64 Hubbard op. cit. pp 32-34, says that rationing was concentrated in the towns, but some 25m peasants and dependents may have been entitled to rations of some sort. They usually received bread, flour and grain and some sugar. Meat, butter eggs etc were reserved for industrial workers. G Neiman, "Tovarooborot mezhdur VII i VIII s'ezdami sovetov", 'Sovetskaya Torgovlya' No 1 1937, p 14, says that even when the sale of goods was not rationed in 1936 peasants still had to shop in town for such goods as sugar, fish, flour and groats, because village trade was so limited.
- 65 SOT-36 p 70.
- 66 MAL p 146, Baykov, 1946, op. cit. pp 236-37.
- 67 See JC-50 pp 66-67.
- 68 A Silonov, "Bor'ba za soveteskuyu politiku tsen - odna iz tsentral'nykh zadach", Sovetskaya Torgovlya No 4-5, 1932, p 134.
- 69 Ya Leibman, "Za dal'neishee razvertyvanie sovetsoi torgovli", Bol'shevik No 21, 1931, p 67.
- 70 I R [no name given], "Dvizhenie tsen v pervom polugodii 1928/1929 goda [obzor]", Puti Industrializatsii No 9, 1929, pp 62-63.
- 71 Sh Turetskii, "Puti planirovaniya tsen", Planovoe Khozyaistvo No 3, 1936, p 132.
- 72 See Turetskii, loc. cit., and A Sen'ko, "Organizatsiya prodvizheniya kustpromtovarov k potrebitelyu", Sovetskaya Torgovlya No 6, 1933, p 94.
- 73 G Aronshtam, "Bor'ba za soveteskuyu politiku tsen", Sovetskaya Torgovlya No 2-3, 1935, p 23.
- 74 MAL pp 197-99 cites the ending of the rationing system as a measure which reduced the opportunities for illegal price increases.
- 75 See Silonov, op. cit., pp 134-37.
- 76 G Angarov, "O Leningradskoi kolkhoznai yarmarke 25-26 iyunya", Sovetskaya Torgovlya No 1, 1932, p 106.
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CHAPTER II

The Basket of Goods and Weights Used in the Calculation of the Price Indices

This chapter is divided into two main sections. The first section looks at the goods of the "typical village assortment" that come within the scope of this study, and assesses the degree of coverage of rural socialised retail trade in these goods. The second section presents the weights attached to these goods in calculating the price indices. Since both Laspeyres and Paasche formulas are to be used to calculate the indices this necessitates presenting base-year (1928) weights and given-year weights for 1934-37. The second section examines the problems associated with providing given-year weights for the whole of the 1934-37 period, and tests the accuracy of a "typical-year" weight for 1936-37, using data for 1935.

2.i. The Goods Included in the Study

The study concentrates on purchases in socialised trade of the major manufactured goods and processed agricultural products, made by the peasantry in 1928 and 1934-37. During this period the typical "village assortment" of these goods was as follows: flour, bread, groats and pulses, sugar, confectionery, salt, vegetable oil, herring and other fish, vodka, tobacco goods, matches, paraffin, household soap, haberdashery and perfumes, footwear, cotton and wool cloth and clothing.¹ Of these goods, confectionery, perfume and clothing have not been included in our study due to lack of data.

The actual goods covered are as follows: rye flour, wholewheat flour, rye bread, wheat bread, ground millet, buckwheat groats, rice, melted butter, sunflower oil, sugar (granulated and lump), herring, pike-perch, salt, tea, vodka, cigarettes, smoking makhorka, matches, household soap, paraffin, thread, calico, coarse calico, moleskin, woollen cloth, cotton socks, galoshes, men's boots, ladies' boots, ladies' oxfords, children's oxfords.

The goods included in this study accounted for the following percentages of either village consumer co-operative or co-operative trade in all manufactured goods and processed agricultural products in 1928-35:²

1928	1934	1935
72.9%	68.9%	72.3%

As can be seen, the sample of goods chosen remained a fairly constant percentage of the total in this period. Changes within this overall percentage were quite substantial, however. Of the goods not included in the study the most important are clothing and hardware and crockery. In 1928 1.4 per cent of turnover of manufactured goods and processed agricultural products was accounted for by made-up clothing and linen. In 1935 this had increased to 5.3 per cent. In the case of hardware and crockery the percentages were 6.0 per cent and 2.0 per cent in 1928 and 1935 respectively. The remaining goods not included in the study were made up of "other foodstuffs" and "other non-foodstuffs" not specified in the handbooks, toilet soap and perfume, printed and paper goods, saddlery goods, and goods made of wood.

In all cases either insufficient information on the goods included in a category or lack of pricing data have prevented us from including the goods listed above in the study. It is believed, however, that a survey that covers around 70 per cent of the turnover of manufactured goods and processed agricultural products will give a good indication of the change occurring in the consumption of these general categories.

2.ii. The Weights Used in the Calculation of the Price Indices

As indicated in Chapter 4 our study uses the Laspeyres and Paasche formulas for calculating the price indices. These require two sets of weights - base-year and given-year - to be computed for each year of the study. This section presents general observations on the method of obtaining the weights. More detailed calculations are presented in Appendix E.

The study uses as the basis of comparison peasant budget data on expenditure on manufactured goods and processed agricultural products in 1928 and 1934-37, adjusted to give that part of this expenditure

made in retail socialised trade. The budget data is inadequate to the task of providing the weights used in calculating the price indices, however, for two reasons:

- a) The breakdown into sub-groups is too general to be of use, given that the sample covers over 30 basic products. Thus, the 1934-37 studies list general categories such as "clothing and footwear", "foodstuffs" and "non-foodstuffs" without breaking these down into their constituent parts. The 1928 study gives 12 categories covering the goods in this study, which is an improvement on the 1930s studies, but again no breakdowns of these categories are provided.
- b) The study examines real expenditure in socialised trade, whereas the budget data refers to expenditure in both the socialised and private markets. Since the private market accounted for a significant proportion of expenditure on these goods in both 1928 and 1934-37, the inclusion of this could distort the weights.

Instead of the budget data, retail turnover of rural consumer co-operatives in 1928, and of rural co-operatives in 1934 and 1935, are used. Table 3 presents the weights calculated in Appendix E. The retail turnover data has been used because it is believed that this will more adequately reflect expenditure by the peasantry in socialised trade; co-operative trade accounted for 71.1 per cent of village socialised trade in 1928, and 58.0 per cent and 66.0 per cent in 1934 and 1935 respectively.³ Co-operative trade was the main channel for socialised trade to the peasantry at this time. Workers, administrative employees and others were supplied mainly through state shops in the rural sector.⁴

The turnover data is also more detailed than that of the budget studies. Thus, for 1928 17 categories of the goods covered in the study are given in the retail turnover data, in 1934 22 are listed, and in 1935 - 19. This reduces the need to make separate calculations in order to break down the general categories of goods, and at the same time it provides broadly comparable weights for each period. Furthermore, the 1934-37 budget data is so scant that it would have been impossible to calculate weights attached to each category of good.

Table 3 overleaf shows that, despite changes in the internal

TABLE 3

The Weights Used in the Study, 1928, 1934 and 1935: Retail
Turnover of Rural Consumer Co-operatives in 1928, and Rural Co-oper-
atives in 1934 and 1935 (m rubles current prices)

Good	1928	1934	1935
1 Rye flour (95%)	0.41	1.72	2.70
2 Wholewheat flour (96%)	1.18	3.75	5.75
3 Rye bread (95%)	0.06	0.79	9.53
4 Wheat bread (80%)	0.15	2.16	25.75
5 Ground millet 1st sort	0.09	0.91	1.39
6 Buckwheat groats	0.09	0.91	1.39
7 Rice, 1-2 sort	0.09	0.91	1.39
8 Melted butter	0.02	0.48	0.68
9 Sunflower oil	0.30	0.57	0.80
10 Sugar, granulated	1.12	2.33	4.57
11 Sugar, lump	1.12	2.33	4.57
12 Herring, ordinary	0.22	0.46	1.17
13 Pike-perch	0.80	1.72	3.32
14 Salt	0.36	1.32	1.29
15 Tea	0.48	0.93	1.55
16 Vodka	1.52	38.94	37.34
17 Cigarettes	0.41	3.54	4.09
18 Smoking makhorka	0.58	1.51	2.72
19 Matches	0.28	0.92	1.13
20 Household soap	0.39	2.57	2.97
21 Paraffin	0.59	1.37	1.92
22 Thread	1.62	4.07	4.27
23 Calico	1.82	5.53	5.28
24 Coarse calico No 40	1.82	3.53	4.29
25 Moleskin	1.82	6.29	6.92
26 Woollen cloth	0.70	2.96	4.19
27 Cotton socks, men's	0.37	4.21	4.76
28 Galoshes, men's	0.28	2.57	2.97
29 Boots, men's, black	0.13	1.33	1.45
30 Boots ladies'	0.13	1.33	1.45
31 Ladies' oxfords	0.13	1.33	1.45
32 Children's oxfords	0.13	1.33	1.45
33 Total	19.17	104.65	154.77
34 Total of all manufactured goods and processed agricultural products listed in the handbooks	26.30	151.89	214.03
35 Line 33 as % of line 34	72.9%	68.9%	72.3%

Source: See Appendix E, Table E1

composition of the weights, the percentage of turnover of rural co-operative trade taken up by the goods studied remained fairly constant at 72.9 per cent in 1928, 68.9 per cent in 1934 and 72.3 per cent in 1935. The main reason for this seems to be the lack of penetration of new goods into rural expenditure patterns at this time. Such new goods as margarine and conserves, which were not sold in the village in 1928, accounted for less than 0.3 per cent of rural turnover of co-operative trade in 1934. This reflects the tendency for such items in the typical "village assortment" of goods as grain products, sugar, tea, vegetable oil, salt, tobacco goods, matches, household soap, knitwear, cotton cloth, wool cloth, clothing, leather footwear, galoshes and minor haberdashery items, to dominate rural spending throughout this period.⁵ This is understandable, given that at the beginning of the period the peasantry's consumption of manufactured goods and processed agricultural products was extremely low and concentrated on the most basic products.

The relative size of retail turnover for the goods purchased by the peasantry in both periods did show substantial changes, most notably in the sales of vodka, bread and bakery products and cotton and woollen cloth. This was due to a combination of the state policy of procuring higher proportions of agricultural produce and giving greater emphasis to centralised manufacturing industry, such as the clothing industry, and the willingness of the peasants to purchase finished products. Thus, sales of vodka and bread and bakery products increased by over 24 and 168 times respectively in this period as against the average for all goods listed in the study of eight times, and turnover of cotton and woollen cloths increased by three times and six times respectively (all figures are approximate, see Appendix Table E1, lines 2, 8, 13, 14 and 27). The effect of such changes in the weights upon the resultant price indices was quite substantial. Thus, for 1934-37 the difference between the Laspeyres (base-year weights) and Paasche (given-year weights) common sample price indices are as follows (1928 = 100):

	Laspeyres	Paasche
1934	542.4	470.0
1935	684.6	594.1
1936	661.4	572.4
1937	653.0	564.7

Sources: Laspeyres - taken from Appendix Tables F1, F3, F5 and F7

Paasche - taken from Appendix Tables F2, F4, F6 and F8

The difference partially reflects the tendency of consumers to switch purchases to relatively cheaper goods during a period of inflation. However, given the shortages prevailing throughout this period, it must also reflect a change in the proportionate relationship in the later period between such goods as cloth and footwear and foodstuffs in state supply plans. This accords with the food shortages observed at the time and the state's policy of giving the urban sector priority in supply.

Reference to Tables 3 and 14 (chapter 4), however, also shows that, at least from 1935 on, there was some evidence of "inferior goods", as sales of bread and bakery products increased substantially, whilst the prices of these goods rose above the average. It is likely that this phenomenon would have been repeated with other grain products, had state policy been to develop trade in flour etc in the same way as bread sales were developed from 1935 on.

Examination of Appendix Table E1 shows that of the 20 groups of goods listed as weights, only six - flour, groats and pulses, bread and bakery products, herring and other fish, sugar, cotton cloth and leather footwear - had to be broken down into sub-groups. Thus, the retail turnover data could be used directly to provide the weights for the other 14 groups. In the case of the six groups listed above the breakdown into sub-groups was made either on the basis of turnover for earlier years, or on production figures. The notes accompanying Appendix Table E1 give details of the calculations.

2.iii. The "Typical-Year" Weight for 1935-37

It should be noted that weights are provided for 1928, 1934 and 1935. None are given for 1936 and 1937, due to lack of available data. Instead, 1935 has been taken as a "typical-year" weight for the period 1935-37. It was felt that this would be a more accurate method of weighting the indices than using Chapman's method of taking retail

socialised trade turnover in the urban and rural sectors in 1937 as representative, since the latter includes expenditure patterns of urban sector workers and employees.⁶ Clearly Chapman's method could result in substantial distortion of the weights.

The use of retail turnover of rural co-operatives in 1935 as a typical-year weight also poses some problems of accuracy, because patterns of expenditure could have changed in 1936 and 1937. However, the period covered, 1935-37, is a short one, and the major change which could have affected expenditure patterns - the end of rationing - had already been achieved for most goods in 1935. To give an indication of how close the 1935 turnover figures could have been to those in later years Table 4 overleaf presents a comparison between the percentages of rural retail co-operative trade accounted for by selected groups of goods in 1935 and 1938 (the sample was determined by the limited data for 1938 and includes some categories of goods not covered in this study). It can be seen from the table that the percentages of turnover of butter and toilet soap, perfume and items of sanitation and hygiene were identical, and those for silicates, hardware, paraffin and petroleum products and household soap were very close. Baked bread and baked products, and cotton cloth were close, and only flour, groats, pulses and macaroni goods, sugar and matches substantially diverged during this period. Given that the comparison is between 1935 and 1938 (ie a three-year gap instead of two), it is considered that it is sufficiently close in general to enable the 1935 data to be used as a typical-year weight.

TABLE 4

Percentage of Rural Co-operative Trade Represented by Selected Goods
1935, 1938

Goods	1935	1938
1 Flour, groats, pulses and macaroni goods	4.5	6.0
2 Baked bread and bakery products	18.2	14.9
3 Butter	0.3	0.3
4 Sugar	4.5	7.6
5 Silicates	0.8	0.9
6 Hardware	2.2	1.9
7 Paraffin and petroleum products	1.2	1.1
8 Matches	0.6	0.4
9 Cotton cloth	9.0	7.3
10 Household soap	1.7	1.6
11 Toilet soap, perfume and items of sanitation and hygiene	1.1	1.1
12 Total	44.1	43.1

Sources: 1935 - SOT-36 p 94

1938 - EPS p 385

Notes

Line 3: The percentage for 1935 was calculated by taking 40 per cent of the total turnover of butter, margarine and vegetable oil (0.7% of total turnover). This was the percentage of the turnover of these goods in 1934 accounted for by butter.

Lines 5 & 6: Retail sales of hardware and silicates took 3.0 per cent of total turnover in 1935. Of this, 74 per cent of the weight was allocated to hardware and 26 per cent to silicates (same percentage breakdown as for 1934).

FOOTNOTES

- 1 See "Osnovnye momenty organizatsii i tekhniki roznichnoi
torgovle na sele Kurinin", Sovetskaya Torgovlya No 1, 1932,
p 124; I Malkis, Potreblenie i spros v SSSR, Leningrad 1935,
pp 142-44.
 - 2 See Table 3.
 - 3 SOT-56 p 22, SOT-36 pp 70, 94, and TGR pp 28-29.
 - 4 Hubbard 1938 op. cit. pp 32-42.
 - 5 "Osnovnye momenty organizatsii i tekhniki roznichnoi trgovle
na sele Kurinin", loc. cit. and Malkis, loc. cit.
 - 6 CHA p 76.
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The Method Used to Collect the Price Statistics and the Calculation of the Annual Average Prices Paid by the Peasantry in Retail Socialised Trade

This chapter describes the method used to obtain the village and urban prices paid by the peasantry, given the absence of systematic data in Soviet sources. A short section analyses the comparability of the goods listed for 1928 and 1934-37, then the prices observed in this period are presented. Finally, the annual average prices paid by the peasantry in all sectors of retail socialised trade are calculated. The latter is necessary, because prices were often different in the urban and rural sectors.

3.i. The Method Used to Collect the Price Statistics

Two methods were used to obtain the average prices paid by the peasantry. They can be divided by the period covered: that used to obtain prices for 1928, and that for 1934-37. Before examining this method, however, it is necessary to examine the problem associated with the comparability of the goods priced in both periods, because if the goods are not comparable it will be impossible to estimate price changes. This is best illustrated by an example: a 20 per cent increase in the price of ground millet between two periods could be due to inflation, but it could also be due to comparing the price of second sort ground millet in the initial period with first sort, higher quality, ground millet in the second period. In the latter case we cannot claim that the price difference is due to inflation.

When comparing the goods in the study, recourse is made to the descriptions given in the sources on annual prices in 1928, or to descriptions given in the handbooks in 1934-37. Usually, the handbooks give a description of sufficient detail to enable the good to be fairly accurately categorised. Such factors as the sort, the type of material used in producing the good, percentage level of processing (in the case of flour and bread), product number, general description, colour etc are used to identify the good.

The data on prices in 1928, however, can be more perfunctory. Many sources give only general descriptions of the goods quoted, without indicating their specific characteristics. Fortunately, the main source, E Chernomordik, Indeksy tsentrosoyuza-osnovnye postroeniya, Moscow 1929, gives detailed descriptions on a par with those provided in the pricing handbooks in the 1930s. This is probably because the data was used to construct Tsentrosoyuz price indices and had to be of sufficient detail to enable fairly accurate comparisons to be made between goods, whereas the sources on 1928 mentioned above were secondary ones.

Coupled with other data on retail prices in socialised trade in 1928, and Janet Chapman's excellent study of Moscow retail prices, the sources on 1928 prices enable us to make a reasonably accurate comparison between the goods sold in 1928 and those in 1934-37; see Appendices A and B for the retail prices observed in the two periods and detailed descriptions of the goods studied.

It is believed that an acceptable level of comparability has been obtained for the following goods over the entire period: flour, groats, bread, sunflower oil, melted butter, sugar, salt, fish, makhorka, cigarettes, matches, paraffin, thread, cotton cloth, woollen cloth, galoshes and leather footwear. In the case of tea and gents' socks, it is likely that the goods chosen are comparable, but slight misgivings are expressed. Only in the case of vodka and household soap have doubts been expressed about comparability, and in this case specific circumstances are responsible. Appendix C presents the findings on comparability of the goods in the study.

Collecting the average prices paid by the peasantry in 1928

For this year there appears to be reliable data on all-union rural and urban retail prices of either co-operative or state and co-operative trade (see Appendix A). The most reliable source, in terms of descriptions of the goods listed and comprehensiveness of the data is Chernomordik. It gives prices prevailing in rural and urban co-operative trade in the first half of 1928, broken down into monthly quotations. Given the stability of most prices of manufactured goods sold in socialised trade in 1928, and the dominance of co-operative trade in rural purchases of manufactured goods (71% of

rural turnover of socialised trade),¹ the prices quoted by Chernomordik have been taken as representative in most cases.

In order to give a more accurate picture of prices prevailing in rural, and especially urban, socialised trade at this time, prices quoted by Malafeev and a Gosplan publication have also been used. It is most likely that both sources refer to prices charged in rural and urban consumer co-operatives throughout 1928.

Unfortunately, the coverage of goods and their descriptions were not as detailed and comprehensive as those of Chernomordik, but used in combination with the Chernomordik prices they provide a valuable check on the accuracy of price quotes of the former and enable adjustments to be made where necessary. Finally, the Moscow prices provided by Chapman have also been used in the calculation of the 1928 prices. These were either used as the basis for the calculation of prices not provided in the sources listed above, or used as a check on the accuracy of the urban, and sometimes the rural, prices already quoted. This was possible because Chapman often indicates that the prices of some goods, for example cigarettes, had constant prices throughout the USSR.²

The Chapman data was used as the basis for calculations of the prices of the following goods: ladies' boots, ladies' oxfords, children's oxfords, men's cotton socks, pike-perch, wholewheat flour and wheat bread. Details of the calculations are given in Appendix A.

Of the 32 goods listed it is believed that the prices quoted for 20 (rye flour, ground millet, buckwheat groats, sunflower oil, sugar granulated, sugar lump, herring ordinary, salt, tea, cigarettes, smoking makhorka, matches, household soap, paraffin, thread, calico, coarse calico, moleskin, woollen cloth and galoshes) are accurate representations of the prices prevailing in rural and urban co-operative trade (and most probably socialised trade) in 1928. Two goods, melted butter and vodka, had prices set close to or identical to those quoted by Chernomordik. They are believed to be close to the prices prevailing at this time. Of the remaining ten goods, it has already been stated that the prices of seven were calculated on the basis of the Moscow data provided by Chapman. The remaining three goods, rye bread, rice and men's boots, also had rural prices calculated on the basis of the relationship between urban and rural

prices. The prices of these ten goods can only be regarded as rough approximations of those prevailing in co-operative trade at this time.

It is believed that, apart from Chapman, the sources of price quotations listed above all refer to co-operative trade. As indicated, this channel of socialised trade was the major one in the rural sector in 1928. Nevertheless, state trade was also an important channel of socialised trade at this time, especially in the urban sector. Unfortunately, it was not possible to obtain separate quotes for prices charged in state shops. Given that the peasantry made most of their purchases in rural socialised trade through co-operatives, that their purchases in urban state trade would have been a relatively small percentage of their overall purchases (they made 23% of their purchases in urban sector socialised trade in 1928, and state trade accounted for 61% of urban socialised trade turnover at this time),³ and that Chapman quotes Moscow state and co-operative prices that did not diverge significantly from many of the urban prices listed in Appendix Table A1 for the whole of the USSR, it is believed that the assumption that co-operative trade prices were representative of the prices paid by the peasantry in socialised trade in 1928, will not introduce a significant error into the calculations.

Collecting the average prices paid by the peasantry in 1934-37

The method for obtaining the price quotes was to use original sources - the pricing handbooks - since comprehensive all-union prices are not available in the easily digestible form provided for 1928 prices. The period can be divided into two sub-periods: rationing, in 1934-35; and unitary prices and open trade in 1936-37.

The rationing period, 1934-35

The basic source was the pricing handbooks issued to local trading organisations by regional administrations throughout the USSR. The handbooks gave the prices of the major goods sold in socialised trade in an identified area - a city, oblast, krai or even republic - and often from a specific date. In most cases the local prices were set according to central resolutions. Usually the date and number of

the resolution introducing each price would be quoted in the handbook. From this it was possible to plot the date of introduction of a price in a specific area and give the latest date of operation of that price. By comparing prices and resolutions quoted in different areas of the USSR it was possible to build up a uniform picture of the level of prices and the pricing structure prevailing at this time. Furthermore, the unitary nature of the two main prices in operation under rationing (normal fund prices and commercial prices - see chapter 1) was confirmed by two general handbooks not specifically related to pricing in one specific area of the USSR. These were: TTR, for normal fund prices ; and PR-34, for commercial fund prices.

The specific areas referred to by the regional handbooks were: Leningrad Oblast, Leningrad City, Gorkii Krai, Azov-Black Sea and North Caucasus Krai, Georgian SSR, Moscow Oblast, Moscow City, Western Oblast, Central Black Earth Oblast, Western Kazakhstan Oblast, Stalingrad Krai, Western Siberian Krai and Ufa City. Used in conjunction with the centrally issued handbooks, central and local bulletins on trade (which often provided up-dates on pricing resolutions), and secondary sources on Soviet trade at this time, it was possible to build up a picture of average prices paid by the peasantry of sufficient detail to enable us to claim a high degree of accuracy. The calculations made are presented in Appendix B.

No distinction is made in the handbooks between prices charged in state and co-operative trade. It is assumed that the normal fund and commercial fund prices charged were common to each sector.

Unitary prices and open trade, 1935-37

Beginning in January 1935 the rationing system began to be dismantled, and by the end of that year unitary prices had been introduced for most goods.

The unitary prices applied throughout the USSR and were differentiated by regional belts. The job of collecting the price data relating to the unitary system has been made much simpler than that for the rationing period by the fact that the regional belt prices for most goods were set centrally and published in official collections. Thus,

the main sources are the handbooks Sbornik otpusknykh i roznichnykh tsen i torgovykh nakidok na prodovol'stvennye tovary, Leningrad-Moscow 1936, Otpusknye i roznichnye tseny i togovye nakidki na promptovary, Leningrad-Moscow 1936, and Sbornik roznichnykh tsen i torgovykh nakidok (skidok) na prodovol'stvennye i promyshlennye tovary. Kniga I-ya. Prodovol'stvennye tovary, Moscow Leningrad 1939. These give comprehensive lists of the regional prices applying for most of the goods in the survey, with breakdowns of the regional belts.

As well as the data presented in the central handbooks on prices, central and local bulletins on the introduction of unitary prices and changes in prices have also been used. These were backed up by price quotations given by Chapman, statistical data on price changes presented in the official statistical handbooks on trade, secondary Soviet sources on retail trade in the 1930s, and local pricing handbooks giving the belt prices applying in the following regions of the USSR at various times: Gorkii Krai, Stalingrad Oblast, Chuvash ASSR, Arkhangel Oblast, Kirov Krai, Leningrad Oblast, West Kazakhstan Oblast, Moscow Oblast, Moscow City, West-Siberian Krai and Azov-Black Sea Krai. Together they have enabled a highly detailed and accurate picture of pricing and price levels to be constructed for the early period after the introduction of unitary prices. This was also aided by the fact that the prices of most manufactured non-foodstuffs remained fairly stable from early 1936 up to mid-1937, when there was a well-documented reduction in the prices of some of these goods.

Again, no distinction is made in any of the sources between prices in state and co-operative trade. A distinction was made in the prices charged for cloth, clothing and footwear in Moscow, Leningrad, Kiev and Minsk, and those prices charged elsewhere in the USSR from mid-1936 on. Details of this and of the working involved in obtaining the prices are given in Appendix B.

The unitary prices, which were, in fact, differentiated by regional belts, were weighted by the level of rural retail turnover of socialised trade in 1934 to give averages for the USSR; see Appendix D.

3.ii. Prices Observed in 1928 and 1934-37

Table 5 overleaf presents the average prices paid by the peasantry in 1928 and 1934-37. These prices were observed using the method outlined earlier in this chapter. Columns a and b list the average prices paid by the peasants in rural and urban retail socialised trade respectively. These are averages for the whole year for each sector, and are the prices paid by the peasantry - they are not necessarily the prices charged to other social groups (only in 1928 can the prices be regarded as averages for the whole of both the rural and urban sectors).

Details of how the prices were compiled and the sources used are given in Appendix A (prices in 1928), and Appendix B (prices in 1934-37).

A rough comparison between the prices listed for 1928 and those for later years shows that there was substantial inflation in this period. However, in order to obtain a correct price comparison it is necessary to weight the prices paid by the peasantry in each sector, because there were substantial differences between the two. This will be dealt with in the next section.

3.iii. Annual Average Prices Paid by the Peasantry in all Sectors of Retail Socialised Trade

This section has been divided into two periods: 1928 and 1934-37. In both cases calculations have been made of the average annual price paid in both the urban and rural sectors of socialised retail trade.

Annual average prices in 1928

In this year most prices charged in socialised trade differed between the urban and rural sectors; see Appendix Table B1-4. Since the peasantry made purchases in both sectors, it is necessary to weight the relative prices by the proportion of purchases made in these sectors by the peasantry.

In 1928 17 per cent of purchases of manufactured goods in urban retail socialised trade were made by the peasantry.⁴ In the same year total retail turnover of urban socialised trade was R 7793.2m. Assuming

TABLE 5

Average Prices Paid by the Peasantry in (a) Rural and (b) Urban
Retail Socialised Trade, 1928, 1934-37 (rubles)

Good		1928		1934		1935		1936		1937	
		a	b	a	b	a	b	a	b	a	b
1 Rye flour (95%)	kilo	0.11	0.10	0.53	-	2.07	2.07	1.48	1.48	1.46	1.46
2 Wholewheat flour (96%)	"	0.17	0.14	0.59	-	2.26	2.26	1.74	1.74	1.72	1.72
3 Rye bread (95%)	"	0.10	0.09	0.42	1.50	0.93	0.93	0.82	0.82	0.82	0.82
4 Wheat bread (80%)	"	0.21	0.18	0.97	3.00	1.86	1.86	1.62	1.62	1.60	1.60
5 Ground millet 1st sort	"	0.20	0.17	0.31	4.63	2.37	2.37	1.98	1.98	1.97	1.97
6 Buckwheat groats	"	0.21	0.19	0.36	6.25	4.52	4.52	4.19	4.19	4.18	4.18
7 Rice, 1-2 sort	"	0.57	0.51	1.13	9.34	7.62	7.62	5.87	5.87	5.87	5.87
8 Melted butter	"	1.98	2.26	na	na	na	na	19.53	19.53	19.53	19.53
9 Sunflower oil	litre	0.55	0.47	2.73	21.74	5.22	18.44	12.70	12.70	12.70	12.70
10 Sugar, granulated	kilo	0.65	0.62	3.55	12.16	3.82	6.03	4.03	4.03	4.03	4.03
11 Sugar, lump	"	0.73	0.70	4.05	14.30	4.25	6.85	4.23	4.23	4.23	4.23
12 Herring, ordinary	"	0.58	0.54	na	na	na	na	5.87	5.90	5.87	5.90
13 Pike-perch	"	0.53	0.49	na	na	na	na	3.71	3.73	3.71	3.73
14 Salt	"	0.04	0.04	0.10	0.10	0.12	0.11	0.18	0.13	0.18	0.13
15 Tea	"	6.56	6.30	20.60	50.30	50.30	65.15	80.00	80.00	80.00	80.00
16 Vodka	$\frac{1}{2}$ litre	1.06	1.07	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
17 Cigarettes	25	0.14	0.14	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
18 Smoking makhorka	50 gms	0.07	0.06	0.25	1.00	0.42	0.67	0.42	0.42	0.35	0.35
19 Matches	10 boxes	0.15	0.15	0.30	0.30	0.30	0.30	0.25	0.25	0.23	0.23
20 Household soap	kilo	0.51	0.47	2.50	3.00	2.66	2.68	2.39	2.31	2.35	2.27
21 Paraffin	litre	0.12	0.10	0.72	0.49	0.72	0.49	0.72	0.49	0.72	0.48
22 Thread	bobbin	0.14	0.13	0.43	0.43	0.41	0.41	0.41	0.41	0.41	0.41
23 Calico	metre	0.41	0.39	1.94	1.94	2.35	2.35	2.31	2.32	2.15	2.25
24 Coarse calico No 40	"	0.38	0.37	2.07	2.07	2.35	2.35	2.58	2.56	2.49	2.54
25 Moleskin	"	0.70	0.67	2.79	2.79	3.23	3.23	3.69	3.69	3.75	3.83
26 Woollen cloth	"	4.22	4.03	21.00	21.00	31.95	31.70	42.89	42.58	42.89	42.82
27 Cotton socks, men's	pair	0.53	0.51	2.28	2.28	2.16	2.15	1.93	1.88	1.85	1.81
28 Galoshes, men's	"	3.60	3.60	15.00	15.00	15.00	15.00	15.00	15.38	14.30	15.05
29 Boots, men's, black	"	9.41	8.90	27.67	27.67	na	na	48.65	50.84	47.35	52.38
30 Boots ladies'	"	12.16	11.50	30.00	30.00	na	na	44.63	45.39	43.33	46.52
31 Ladies' oxfords	"	9.67	9.15	27.75	27.75	na	na	42.41	42.71	41.18	42.86
32 Children's oxfords	"	4.86	4.60	12.00	12.00	na	na	17.46	17.46	16.96	17.37

A dash indicates that the good was not available to the peasants in the urban sector

na - an average price was not available

Sources: See Appendix Table B5

that the same percentage of this turnover was accounted for by manufactured goods and processed agricultural products as in urban co-operative trade in 1928 (87%), this gives an approximate figure for urban socialised retail turnover of these goods of R 6780.1m. Taking 17 per cent of this figure gives R 1152.6m. Total village turnover of socialised trade in 1928 was R 3956.8m. Assuming that the same percentage of this turnover was accounted for by manufactured goods and processed agricultural products as in rural co-operative trade (96.9%), this gives us an approximate figure for the village socialised retail turnover of these goods of R 3834.1m.⁵ Adding this to R 1152.6m gives total village purchases of manufactured goods and processed agricultural products of R 4986.7m. Thus, the urban purchases, R 1152.6m, are 23 per cent of this total, and the remaining 77 per cent of purchases were made in the rural sector. These percentages are used in the calculations of the average prices paid by the peasantry in socialised trade in 1928. Due to lack of data it was not possible to break these figures down into sub-sectors.

Table 6 presents the calculations of the average prices paid by the peasantry in socialised trade.

Annual average prices in 1934-37

As Appendix Tables B1-B4 show, most of the prices paid by the peasantry in rural and urban sector socialised trade were different throughout this period. Thus it is necessary to calculate the weight to be attached to the prices in each sector, based on the proportion of purchases made by the peasantry, in order to obtain average prices which are representative of those paid by the peasantry.

According to calculations made by the Central Scientific Research Institute of Soviet Trade, in 1935 the village population made around 40 per cent of their purchases in socialised trade in the urban sector.⁶ In 1936 this fell to 29.5 per cent of their purchases in state and co-operative trade, according to the same source (mainly due to the increase in village trade turnover).⁷ Another source gives a specific figure of 43 per cent as the percentage of total purchases of the village population that were made in the urban sector in 1935.⁸ This appears to be a more feasible figure than the approximation for 1935 presented earlier.

TABLE 6
Calculation of the Average Annual Prices Paid by the Peasantry in
Socialised Trade, 1928 (rubles)

Good	1 Rural sector price	2 Urban sector price	3 0.77 x col 1	4 0.23 x col 2	5 pg 28 (3+4)
1 Rye flour (95%)	0.11	0.10	0.085	0.023	0.11
2 Wholewheat flour (96%)	0.17	0.14	0.131	0.032	0.16
3 Rye bread (95%)	0.10	0.09	0.077	0.021	0.10
4 Wheat bread (80%)	0.21	0.18	0.162	0.041	0.20
5 Ground millet 1st sort	0.20	0.17	0.154	0.039	0.19
6 Buckwheat groats	0.21	0.19	0.162	0.044	0.21
7 Rice, 1-2 sort	0.57	0.51	0.439	0.117	0.56
8 Melted butter	1.98	2.26	1.525	0.520	2.05
9 Sunflower oil	0.55	0.47	0.424	0.108	0.53
10 Sugar, granulated	0.65	0.62	0.501	0.143	0.64
11 Sugar, lump	0.73	0.70	0.562	0.161	0.72
12 Herring, ordinary	0.58	0.54	0.447	0.124	0.57
13 Pike-perch	0.53	0.49	0.408	0.113	0.52
14 Salt	0.04	0.04	0.031	0.009	0.04
15 Tea	6.56	6.30	5.051	1.449	6.50
16 Vodka	1.06	1.07	0.816	0.246	1.06
17 Cigarettes	0.14	0.14	0.108	0.032	0.14
18 Smoking makhorka	0.07	0.06	0.054	0.014	0.07
19 Matches	0.15	0.15	0.116	0.035	0.15
20 Household soap	0.51	0.47	0.393	0.108	0.50
21 Paraffin	0.12	0.10	0.092	0.023	0.12
22 Thread	0.14	0.13	0.108	0.030	0.14
23 Calico	0.41	0.39	0.316	0.090	0.41
24 Coarse calico No 40	0.38	0.37	0.293	0.086	0.38
25 Moleskin	0.70	0.67	0.539	0.154	0.69
26 Woollen cloth	4.22	4.03	3.249	0.927	4.18
27 Cotton socks, men's	0.53	0.51	0.408	0.117	0.53
28 Galoshes, men's	3.60	3.60	2.772	0.828	3.60
29 Boots, men's, black	9.41	8.90	7.246	2.047	9.29
30 Boots ladies'	12.16	11.50	9.363	2.645	12.01
31 Ladies' oxfords	9.67	9.15	7.446	2.105	9.55
32 Children's oxfords	4.86	4.60	3.742	1.058	4.80

Source: For prices in columns 1 and 2 see Appendix Table A1

Notes to Table 6

Column 1: These are the average 1928 rural socialised trade prices presented in column 5 (a) of Appendix Table A1.

Column 2: These are the average 1928 urban socialised trade prices presented in column 5(b) of Appendix Table A1.

Column 3: These are the prices in column 1 multiplied by 0.75. This was based on the calculation that 75 per cent of peasant purchases made in socialised trade were confined to the rural sector.

Column 4: These are the prices in column 2 multiplied by 0.25 - the proportion of peasant purchases in retail socialised trade made in the urban sector.

Column 5: This is the average price paid by the peasantry in urban and rural sector retail socialised trade. It is the total of columns 3 and 4.

It is believed that the 1935 percentage for peasant purchases in urban trade will be higher than that for other years for the following reasons:

- a) Rationing was ended in 1935 for a number of foodstuffs and some manufactured goods, and one would expect a release of pent-up demand to result in an increase in purchases in the urban sector, given that village trade was not well developed at this time.
- b) Efforts were made in 1936 (and afterwards) to improve rural retail trade and increase its share in total retail sales.⁹
- c) The government increased the share of free sale (commercial price) goods in the total sales of foodstuffs in 1935, as the following table shows:¹⁰

Table 7

Percentage Share of Fund of Open Sale Goods in the Total Market Fund
1934-35

	Year	1st quarter	2nd quarter	3rd quarter	4th quarter
Sugar	1934	4.0	7.6	10.2	11.2
	1935	49.8	49.2	62.2	unitary price
Vegetable oil	1934	3.5	4.8	9.1	4.2
	1935	13.8	19.5	17.5	unitary price
Fish products	1934	15.5	12.1	13.8	17.0
	1935	24.6	30.5	43.5	unitary price
Meat products	1934	8.2	9.1	7.8	7.4
	1935	11.2	14.1	19.8	unitary price

Source: Sovetskaya trgovlya v novoi obstanovke. Itogi 1935g. i zadachi 1936g., Moscow-Leningrad 1936, p 35.

One would expect this to have given the peasantry greater opportunities to purchase deficit goods in the urban sector (since commercial trade was concentrated there).

Initial calculations for 1937 show that 23 per cent of total purchases made by collective farmers were carried out in the town (18% of their foodstuff purchases were also made in the town).¹¹ It should be noted here that collective farmers made up the vast majority of the village population at this time, but that there were individual peasants and various workers and employees in the village and this will mean that there may be a slight difference between the purchasing patterns of the two groups.¹² Unfortunately, no data on these

purchasing patterns has been uncovered so far, but given the fairly small difference in urban and rural prices for most goods after the end of rationing it is believed that this difference will have a negligible influence on the price calculations.

For 1934, again no data has been uncovered. The Soviet economist A A Barsov quotes Narkomfin estimates for 1932 which suggest that around 8 per cent of village purchases were made in the urban sector.¹³ This seems to be an extremely low percentage. A Narkomfin study of 12,292 peasant household budgets in the Ukraine, Belorussian SSR, Moscow Raion, Central Black Earth Oblast, Urals Oblast, Middle Volga, Lower Volga, North Caucasus and Western Siberia, in 1931/32 (agricultural year - 1/7/31 - 30/6/32),¹⁴ shows that 16.1 per cent of purchases by collective farm members in state and co-operative trade were made in the urban sector, and that for individual farmers - 19 per cent. Of purchases by collective farmers on the private market 82.9 per cent were made in the urban sector, and for private farmers - 84.6 per cent.¹⁵

It is believed that purchases in the urban sector increased in 1933 and 1934 for the following reasons:

- a) Village prices of most manufactured goods were increased to commercial levels, thereby eliminating any price differentials between those commercial goods sold in the town and those sold in village consumer co-operatives.¹⁶
- b) Before 1933 commercial trade was not open in the full sense of the word, because it was often made the subject of rationing.¹⁷
- c) In 1933 the free sale of bread began initially in Moscow, Leningrad and Kharkov, and was extended to 331 cities by January 1934.¹⁸ This contributed to the rise in sales of bread and bakery products in urban state and co-operative trade (in current prices) from R 795.6m in 1932 to R 3,614.4m in 1933,¹⁹ and no doubt provided a stimulus to the peasants to purchase these products in the town. Total commercial trade increased from R 3,820m in 1932 to R 13,000m in 1934.²⁰
- d) The selection of goods in village areas was extremely limited.²¹
- e) Commercial trade in the village was also extremely limited, in comparison with the urban sector.²²

f) The development of collective farm trade in 1933 and 1934 gave the peasants greater opportunity to make their purchases of sought-after goods in the town.²³

Given the above evidence it has been decided to set purchases in urban trade by the rural population in 1934 at a mid-point between the average of purchases made by the rural population in urban state and co-operative trade in 1931/32 (17%),²⁴ and the percentage of total purchases made by the rural population in the urban sector in 1935 (43%). This gives an average of 30 percent, which is close to the percentage of such purchases in 1936 (see below for an explanation for the extremely high percentage of purchases in 1935 and the fall in this percentage in 1936-37).

Summing up then, the following are the percentages of rural purchases made in urban state and co-operative trades in 1934-37:

1934	1935	1936	1937
30%	43%	30%	23%

Data on the breakdown of peasant purchases in urban state and co-operative trade by commodity group is extremely limited.

Table 8 below presents the results of a study of purchasing patterns of peasants in 13 republics, krais and oblasts in the first seven months of 1936. As we can see from the table the total percentage of manufactured goods purchased by the peasantry in urban state and co-operative trade (34%) in the first seven months of 1936 is fairly close to the percentage for total purchases throughout that year (29.5%). It is possible that the percentage of purchases of foodstuffs understates the true figure, because only specific manufactured items are listed, and other foodstuffs, such as flour, bread and bakery products and meat products and fats, are not listed.²⁵

Given these limitations it was decided to apply the general percentages for all products presented in table 8 and not to attempt estimation of the percentage breakdown of the overall total. This method appears to be the safest of the two, in terms of avoiding the introduction of inaccuracies into the calculations.

A further point to bear in mind is the regional breakdown of peasant purchases in the urban sector. In the case of the 1936 study of 13

Table 8

Percentage of their Own Purchases of Manufactured Goods Made by the Soviet Peasantry in Urban Socialised Trade, First Seven Months of 1936

<u>Commodity group</u>	<u>% of purchases made in urban sector</u>
a Clothing, cloth, linen haberdashery footwear, galoshes	41.9
b Foodstuffs: sugar, confectionery, tea, coffee, fish, sausage, conserves	28.4
c Paraffin, soap, matches, tobacco, alcoholic and non-alcoholic drinks	21.7
d Cultural goods, crockery, household items	23.1
e Total for manufactured goods (personal use)	34.0

Source: Neiman 1937, op.cit., pp 14-15

areas of the USSR the following percentages for various areas of the USSR were recorded: Moscow Oblast - 58.4 per cent, Leningrad Oblast - 47.9 per cent, Belorussian SSR - 54.5 per cent, Western Oblast - 53.7 per cent, Kiev Oblast - 42.9 per cent, Orenburg Oblast - 8.4 per cent, West Siberian Krai - 11.2 per cent, Azov-Black Sea Krai - 7 per cent, Odessa Oblast - 12.9 per cent and Voronezh Oblast - 20.5 per cent.²⁶

Another study notes that within the average of 43 per cent in 1935 there were the following regional differences in purchases by the rural population in urban trade: Moscow Oblast - 66.7 per cent, Crimean ASSR - 50.6 per cent, North Caucasus Krai - 56.4 per cent, Turkmen SSR - 19.0 per cent, Kara-Kalpak ASSR - 19.0 per cent.²⁷

This brief outline indicates that the areas with the greatest urban development tended to have the higher percentages of rural purchases in urban trade.

A special problem is presented by peasant purchases of foodstuffs in rural and urban state and co-operative trade in 1934. At this time commercial sales of foodstuffs in the village were extremely small. One source using data on commercial sales of foodstuffs in wholesale prices (otpusknye tseny) of industry in 1933,²⁸ indicates that total commercial sales of foodstuffs in 1933 were R 940.4 m, and

the corresponding figure for commercial sales of foodstuffs in the urban sector was R 912.0m.²⁹ This indicates that commercial sales of foodstuffs in the village in 1934 were 3.0 per cent of the total commercial sales of foodstuffs. Thus it has been decided not to make an allowance for village commercial trade in foodstuffs, because it would have represented an extremely small percentage of total village purchases.³⁰ Also at this time the free sale (svobodnaya prodazha) of foodstuffs was concentrated in the town.³¹

Given the evidence provided above, calculation of the final annual prices for each good in 1934-37 will be made using the data presented on page 45 on the percentage of rural purchases made in urban trade. The extent of any influence that this may have upon the final annual price will depend on the size of the difference in urban and rural prices and the size of rural purchases in the urban sector.

Tables 9-12 present the calculations of the annual average prices paid by the peasantry in socialised trade in 1934-37. The notes accompanying the tables show the working.

TABLE 9

Calculation of the Average Annual Prices Paid by the Peasantry in
Socialised Trade in 1934 (rubles)

Good		1 Rural sector price	2 Urban sector price	3 0.7 x col 1	4 0.3 x col 2	5 pn 34 (3+4)
1 Rye flour (95%)	kilo	0.53	.	.	.	0.53
2 Wholewheat flour (96%)	"	0.59	.	.	.	0.59
3 Rye bread (95%)	"	0.42	1.50	0.294	0.450	0.74
4 Wheat bread (80%)	"	0.97	3.00	0.679	0.900	1.58
5 Ground millet 1st sort	"	0.31	4.63	0.217	1.389	1.61
6 Buckwheat groats	"	0.36	6.25	0.252	1.875	2.13
7 Rice, 1-2 sort	"	1.13	9.34	0.791	2.802	3.59
8 Melted butter	"	na	na	na	na	na
9 Sunflower oil	litre	2.73	21.74	1.911	6.522	8.43
10 Sugar, granulated	kilo	3.55	12.16	2.485	3.648	6.13
11 Sugar, lump	"	4.05	14.30	2.835	4.290	7.13
12 Herring, ordinary	"	na	na	-	-	-
13 Pike-perch	"	na	na	-	-	-
14 Salt	"	0.10	0.10	0.070	0.030	0.10
15 Tea	"	20.60	50.30	14.420	15.090	29.51
16 Vodka	$\frac{1}{2}$ litre	5.50	5.50	3.850	1.650	5.50
17 Cigarettes	25	0.35	0.35	0.245	0.105	0.35
18 Smoking makhorka	50 gms	0.25	1.00	0.175	0.300	0.48
19 Matches	10 boxes	0.30	0.30	0.210	0.090	0.30
20 Household soap	kilo	2.50	3.00	1.750	0.900	2.65
21 Paraffin	litre	0.72	0.49	0.504	0.147	0.65
22 Thread	bobbin	0.43	0.43	0.301	0.129	0.43
23 Calico	metre	1.94	1.94	1.358	0.582	1.94
24 Coarse calico No 40	"	2.07	2.07	1.449	0.621	2.07
25 Moleskin	"	2.79	2.79	1.953	0.837	2.79
26 Woollen cloth	"	21.00	21.00	14.700	6.300	21.00
27 Cotton socks, men's	pair	2.28	2.28	1.596	0.684	2.28
28 Galoshes, men's	"	15.00	15.00	10.500	4.500	15.00
29 Boots, men's, black	"	27.67	27.67	19.369	8.301	27.67
30 Boots ladies'	"	30.00	30.00	21.000	9.000	30.00
31 Ladies' oxfords	"	27.75	27.75	19.425	8.325	27.75
32 Children's oxfords	"	12.00	12.00	8.400	3.600	12.00

na - not available

A dot indicates that the peasants were not able to purchase this good in urban socialised trade.

TABLE 10

Calculation of the Average Annual Pices Paid by the Peasantry in
Socialised Trade in 1935 (rubles)

Good		1 Rural sector price	2 Urban sector price	3 0.57 x col 1	4 0.43 x col 2	5 P 35 (3+4)
1 Rye flour (95%)	kilo	2.07	2.07	1.180	0.890	2.07
2 Wholewheat flour (96%)	"	2.26	2.26	1.288	0.972	2.26
3 Rye bread (95%)	"	0.93	0.93	0.530	0.400	0.93
4 Wheat bread (80%)	"	1.86	1.86	1.060	0.800	1.86
5 Ground millet 1st sort	"	2.37	2.37	1.351	1.019	2.37
6 Buckwheat groats	"	4.52	4.52	2.576	1.944	4.52
7 Rice, 1-2 sort	"	7.62	7.62	4.343	3.277	7.62
8 Malted butter	"	na	na	-	-	-
9 Sunflower oil	litre	5.22	18.44	2.975	7.929	10.90
10 Sugar, granulated	kilo	3.82	6.03	2.177	2.593	4.77
11 Sugar, lump	"	4.25	6.85	2.423	2.946	5.37
12 Herring, ordinary	"	na	na	-	-	-
13 Pike-perch	"	na	na	-	-	-
14 Salt	"	0.12	0.11	0.068	0.047	0.12
15 Tea	"	50.30	65.15	28.671	28.015	56.69
16 Vodka	$\frac{1}{2}$ litre	5.50	5.50	3.135	2.365	5.50
17 Cigarettes	25	0.35	0.35	0.200	0.151	0.35
18 Smoking makhorka	50 gms	0.42	0.67	0.239	0.288	0.53
19 Matches	10 boxes	0.30	0.30	0.171	0.129	0.30
20 Household soap	kilo	2.66	2.68	1.516	1.152	2.67
21 Paraffin	litre	0.72	0.49	0.410	0.211	0.62
22 Thread	bobbin	0.41	0.41	0.234	0.176	0.41
23 Calico	metre	2.35	2.35	1.340	1.011	2.35
24 Coarse calico No 40	"	2.35	2.35	1.340	1.011	2.35
25 Moleskin	"	3.23	3.23	1.841	1.389	3.23
26 Woollen cloth	"	31.95	31.70	18.212	13.631	31.84
27 Cotton socks, men's	pair	2.16	2.15	1.231	0.925	2.16
28 Galoshes, men's	"	15.00	15.00	8.550	6.450	15.00
29 Boots, men's, black	"	na	na	-	-	-
30 Boots ladies'	"	na	na	-	-	-
31 Ladies' oxfords	"	na	na	-	-	-
32 Children's oxfords	"	na	na	-	-	-

na - not available

TABLE 11

Calculation of the Average Annual Prices Paid by the Peasantry in
Socialised Trade in 1936 (rubles)

			Rural sector price	Urban sector price	Col. 1 x 0.7	Col. 2 x 0.3	p 36 (3 + 4) 5
Good			1	2	3	4	
1	Rye flour (95%)	kilo	1.48	1.48	1.036	0.444	1.48
2	Wholewheat flour (96%)	"	1.74	1.74	1.218	0.522	1.74
3	Rye bread (95%)	"	0.82	0.82	0.574	0.246	0.82
4	Wheat bread (80%)	"	1.62	1.62	1.134	0.486	1.62
5	Ground millet 1st sort	"	1.98	1.98	1.386	0.594	1.98
6	Buckwheat groats	"	4.19	4.19	2.933	1.257	4.19
7	Rice, 1-2 sort	"	5.87	5.87	4.109	1.761	5.87
8	Melted butter	"	19.53	19.53	13.671	5.859	19.53
9	Sunflower oil	litre	12.70	12.70	8.890	3.810	12.70
10	Sugar, granulated	kilo	4.03	4.03	2.821	1.209	4.03
11	Sugar, lump	"	4.23	4.23	2.961	1.269	4.23
12	Herring, ordinary	"	5.87	5.90	4.109	1.770	5.88
13	Pike-perch	"	3.71	3.73	2.597	1.119	3.72
14	Salt	"	0.18	0.13	0.126	0.039	0.17
15	Tea	"	80.00	80.00	56.000	24.000	80.00
16	Vodka	$\frac{1}{2}$ litre	5.50	5.50	3.850	1.650	5.50
17	Cigarettes	25	0.35	0.35	0.245	0.105	0.35
18	Smoking makhorka	50 gms	0.42	0.42	0.294	0.126	0.42
19	Matches	10 boxes	0.25	0.25	0.175	0.075	0.25
20	Household soap	kilo	2.39	2.31	1.673	0.693	2.37
21	Paraffin	litre	0.72	0.49	0.504	0.147	0.65
22	Thread	bobbin	0.41	0.41	0.287	0.123	0.41
23	Calico	metre	2.31	2.32	1.617	0.696	2.31
24	Coarse calico No 40	"	2.58	2.56	1.806	0.768	2.57
25	Moleskin	"	3.69	3.69	2.583	1.107	3.69
26	Woollen cloth	"	42.89	42.58	30.023	12.774	42.80
27	Cotton socks, men's	pairs	1.93	1.88	1.351	0.564	1.92
28	Galoshes, men's	"	15.00	15.38	10.500	4.614	15.11
29	Boots, men's, black	"	48.65	50.84	34.055	15.252	49.31*
30	Boots ladies'	"	44.63	45.39	31.241	13.617	44.86*
31	Ladies' oxfords	"	42.41	42.71	29.687	12.813	42.50*
32	Children's oxfords	"	17.46	17.46	12.222	5.238	17.46*

* Average for last nine months of 1936

TABLE 12

Calculation of the Average Annual Prices Paid by the Peasantry in
Socialised Trade in 1937 (rubles)

Good			Rural sector	Urban sector	Col. 1	Col. 2	p37
			price 1	price 2	x 0.77 3	x 0.23 4	(3 + 4) 5
1	Rye flour (95%)	kilo	1.46	1.46	1.124	0.336	1.46
2	Wholewheat flour (96%)	"	1.72	1.72	1.324	0.396	1.72
3	Rye bread (95%)	"	0.82	0.82	0.631	0.189	0.82
4	Wheat bread (80%)	"	1.60	1.60	1.232	0.368	1.60
5	Ground millet 1st sort	"	1.97	1.97	1.517	0.453	1.97
6	Buckwheat groats	"	4.18	4.18	3.219	0.961	4.18
7	Rice, 1-2 sort	"	5.87	5.87	4.520	1.350	5.87
8	Melted butter	"	19.53	19.53	15.038	4.492	19.53
9	Sunflower oil	litre	12.70	12.70	9.779	2.921	12.70
10	Sugar, granulated	kilo	4.03	4.03	3.103	0.927	4.03
11	Sugar, lump	"	4.23	4.23	3.257	0.973	4.23
12	Herring, ordinary	"	5.87	5.90	4.520	1.357	5.88
13	Pike-perch	"	3.71	3.73	2.857	0.858	3.72
14	Salt	"	0.18	0.13	0.139	0.030	0.17
15	Tea	"	80.00	80.00	61.600	18.400	80.00
16	Vodka	$\frac{1}{2}$ litre	5.50	5.50	4.235	1.265	5.50
17	Cigarettes	25	0.35	0.35	0.270	0.081	0.35
18	Smoking makhorka	50 gms	0.35	0.35	0.270	0.081	0.35
19	Matches	10 boxes	0.23	0.23	0.177	0.053	0.23
20	Household soap	kilo	2.35	2.27	1.810	0.522	2.33
21	Paraffin	litre	0.72	0.48	0.554	0.110	0.66
22	Thread	bobbin	0.41	0.41	0.316	0.094	0.41
23	Calico	metre	2.15	2.25	1.656	0.518	2.17
24	Coarse calico No 40	"	2.49	2.54	1.917	0.584	2.50
25	Moleskin	"	3.75	3.83	2.888	0.881	3.77
26	Woollen cloth	"	42.89	42.82	33.025	9.849	42.87
27	Cotton socks, men's	pair	1.85	1.81	1.425	0.416	1.84
28	Galoshes, men's	"	14.30	15.05	11.011	3.462	14.47
29	Boots, men's, black	"	47.35	52.38	36.460	12.047	48.51
30	Boots ladies'	"	43.33	46.52	33.364	10.700	44.06
31	Ladies' oxfords	"	41.18	42.86	31.709	9.858	41.57
32	Children's oxfords	"	16.96	17.37	13.059	3.995	17.05

NOTES TO TABLES

- Column 1: These are the average prices charged in rural retail socialised trade in 1934-37, presented in Appendix Tables B1-B4
- Column 2: These are the average prices paid by the peasantry in urban retail socialised trade in 1934-37, presented in Appendix Tables B1-B4. They are not average urban sector prices. They are prices paid by the peasantry in trade channels open to them - mainly commercial trade in 1934-35, and urban sector trade in 1936-37.
- Column 3: These are the prices in column 1 multiplied by the proportion of peasant purchases made in rural socialised trade (see text for explanation).
- Column 4: These are the prices in column 2 multiplied by the proportion of peasant purchases made in urban socialised trade (see text for explanation).
- Column 5: These are the average calculated retail prices paid by the peasantry in socialised trade in 1934-37 - the total of columns 3 and 4.
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FOOTNOTES

- 1 Data provided by SOT-56 p 22 and TGR pp 28-29.
- 2 See TGR pp 138-39, MAL p 165 and CHA.
- 3 Calculated from data provided by SOT-56 p 22, and TGR pp 28-29.
- 4 A A Barsov, Balans stoimostnykh obmenov mezhdru gorodom i derevnei, M 1969, p 27.
- 5 Data on total socialised trade in 1928 Sotsialisticheskoe stroitel'stvo 1935 op. cit. p 552. Data on co-operative trade from TGR pp 28-31.
- 6 G Neiman, Tovarooborot 1937 op.cit., p 13.
- 7 G Neiman loc. cit.
- 8 U Chernyavskii, S Krivetskii, "Pokupatel'nye fondy naseleniya i roznichnyi tovaroooborot", Planovoe Khozyaistvo No 6, 1936, p 114.
- 9 One writer noted that in 1936 collective farm members had already reduced the frequency of their shopping trips to the town, and that the village share in sales of goods such as sugar and household soap had increased, V Egorov, "Sovetskaya trgovlya v poslednem godu vtoroi pyatiletki", Planovoe Khozyaistvo No 2, 1936, pp 95-96.
- 10 "Open sale" in this case appears to refer to commercial and free sale trade - ie at commercial prices.
- 11 Dikhtyar 1961 op.cit. p 405.
- 12 The following are figures on the extent of collectivisation of peasant households in 1933-37, (1 July each year) taken from I Laptev, "Istoricheskie pobedy kolkhoznogo stroya", Sotsialisticheskoe Sel'skoe Khozyaistvo, No 11 (November), 1939, p14:

	No of households in collective farms (thousands)	% of households collectivised
1933	15,258.5	65.6
1934	15,717.2	71.4
1935	17,334.9	83.2
1936	18,448.4	90.5
1937	18,499.6	93.0

- 13 Barsov 1969, op.cit. p 116.
- 14 Z K Zvezdin, "Materialy obsledovaniya denezhnykh dokhodov i raskhodov sel'skogo naseleniya v 1931-1932 gg.", pp 319, 327, Istochnikovedenie istorii sovetskogo obshchestva, vypusk II Moscow 1968.

- 15 Zvezdin 1968 op.cit. pp 336-37.
- 16 PR-34 p 7.
- 17 MAL p 191.
- 18 "O gosudarstvennoi svobodnoi prodazhe khleba", Sovetskaya Torgovlya No 2, 1934, p 143. Of the 5,596 shops opened in 1933 for the free sale of foodstuffs 5,100 sold bread, 65 were "gastronom" stores, 63 sold meat, 92 sold vegetables, 80 sold confectionery, 93 sold milk and 103 sold bran, Dikhtyar 1961 op.cit. p 79.
- 19 SOT-36 pp 68-69.
- 20 VTS p 239.
- 21 Dikhtyar 1961, op.cit. pp 399, 406, indicates that village trade suffered chronic difficulties in the early 1930s. With the end of rationing village supply improved, which would also explain the decline after 1935 of purchases made in the urban sector by those living in the village.
- 22 It appears that commercial sales of foodstuffs in the village accounted for less than 5 per cent of total commercial sales of these goods in 1933 and only 3 per cent in 1934 (measured in wholesale prices of industry in 1933), and in 1930-34, with the exception of 1932, commercial sales of the 12 planned manufactured goods were concentrated mainly on the urban sector, Itogi razvitiya sovetskoi trgovli, op. cit. pp 55-56. The 12 planned manufactured goods were: footwear, galoshes, cotton cloth, wool cloth, knitwear, cigarettes, makhorka, household soap, toilet soap, shawls, made-up clothing, and thread, V Nodel, "O kolkhoznnoi trgovle" Sovetskaya Torgovlya, No 1, 1932, p 49. Total commercial sales in 1933 and 1934 (measured in current prices) were R 6.3bn and R 13bn respectively, VTS p 239. Another author gives the same figure of R 6.3bn as total urban commercial sales in 1933, V Belenko, "Tovarooborot mezhdru gorodom i derevnei", Planovoe Khozyaistvo, No 5-6, 1934, p 171.
- 23 A I Malkis 1935, op.cit., p 86, supports this point. Total sales on the collective farm market were (in current prices), R 7.5bn in 1932, R 11.5bn in 1933, and R 14.5bn in 1935, M A Vyltsan, "Obshchestvenno-ekonomicheskii stroi kolkhoznnoi derevni v 1933-1940gg.", Istoriya SSSR, No 2, March-April 1966, p 59.
- 24 This is the data presented in Zvezdin 1968 op.cit., pp 336-37, weighted by the percentage of collectivised and individual peasant households on 1/7/32 (61.5% collectivisation), presented in Laptev 1939, op.cit. p 14.
- 25 Initially the quantities of bread sold per person after rationing were limited to 2 kilos, according to Hubbard 1938, op.cit. p 59. The Sovnarkom resolution ending rationing of fish products in October 1935 also limited the amount of fish to be sold per head to 3kilos of fish and 1kilo of herring, SOB 13 October 1935, No 51, p 755.

- 26 Neiman 1937, op.cit. p 15.
- 27 Chernyavskii and Krivetskii 1936, op.cit. p 114.
- 28 Itogi razvitiya sovetskoi trgovli op.cit. p 56.
- 29 It appears from a survey of literature on this subject that commercial and free sale goods came from the same fund and had the same prices. The pricing handbooks do not give separate commercial and free sale price quotations for the same good, and they list both types under the commercial section, see PR-34 pp 141-48. Turetskii, 1936, op.cit. p 134, notes that during the rationing period there were three types of free sale price in official trade: commercial, average commercial (average-increased), and model universal store prices. There is no mention of a separate "free sale" price for foodstuffs. Dikhtyar 1961, op.cit. p 386, also supports this assertion.
- 30 Total sales of foodstuffs in commercial and free sale stores in 1933 were R 3.7bn, of which in free sale stores - R 2.8bn. Dikhtyar 1961, loc.cit.
- 31 See Dikhtyar 1961, op.cit. pp 384-86, which also indicates that commercial trade was concentrated in the urban sector. Only in 1932 was any concerted effort made to increase commercial trade in the village, when state outlets in the village were instructed to concentrate on commercial sales to counteract the effects of laxness in supplying goods (see BNK, No 21, 1932 p 4). This appears to have been a short-lived measure.
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C H A P T E R I V

The Price Indices

In this chapter we shall concentrate on the calculation of the price indices for manufactured goods and processed agricultural products purchased by the Soviet peasantry in socialised retail trade in 1928 and 1934-37. A brief description of the method used to calculate the indices will be given. Then the possible effects of the multiple pricing system, the general market situation and changes in the quality of goods upon the price indices are examined. Finally, the price indices calculated using the formulas presented in this chapter are presented, and comparisons are made with other studies (where relevant).

4.i. The Method Used to Calculate the Price Indices

Both the Paasche and Laspeyres formulas have been used to calculate the price indices. They are presented below:

$$\begin{array}{ll} \text{Laspeyres} & I = \frac{\sum \frac{p_n}{p_o} q_o}{\sum q_o} = \frac{\sum Q_o \frac{p_n}{p_o}}{\sum Q_o} \\ \\ \text{Paasche} & I = \frac{\sum \frac{p_n}{p_o} q_n}{\sum q_n} = \text{Reciprocal of } \frac{\sum Q_n \frac{p_o}{p_n}}{\sum Q_n} \end{array}$$

Where:

I = Index

p_o = Prices in the base year

p_n = Prices in the given year

q_o = Quantity in the base year

q_n = Quantity in the given year

Q_o = Rural retail turnover for the good in the base year

Q_n = Rural retail turnover for the good in the given year

Two methods for calculating the price indices have been chosen, because of the well-known properties of index numbers using different weighting methods. The Laspeyres formula measures the change in prices between two periods using the weights of the base year. Thus, when examining a period of price inflation we would expect consumers

acting rationally to buy relatively more of a good that had a lower price and relatively less of a good that had a higher price. In other words the Laspeyres method should give a higher price index number than other formulas using weights of a later period.

In the case of the Paasche formula, one would expect the price index number calculated for a period of inflation to be below that obtained by the Laspeyres formula, because the former uses given-year (ie, later-period) weights. Thus, a consumer acting rationally would tend to purchase more of a good when prices were low and less of a good when prices were high. Greater emphasis (in the weights) would be placed on the goods in the given period that had undergone relatively lower inflation, and less emphasis on the goods with relatively higher inflation, than in the Laspeyres formula.

Both formulas are valid measures of price changes using alternative weights. For, according to index number theory, when rational consumer behaviour and a free market are assumed, and two years are being compared, the goods purchased in the base year are those that will maximise the utility of the consumer given the pricing structure of that year. Similarly, the goods purchased in the given year are those that will maximise the utility of the consumer, given the pricing structure of that year. In each case the consumer will continue to purchase a good until the price is the same as its marginal utility. Problems occur, however, when trying to apply this theory to peasant purchases in the Soviet context.

Firstly, the basket of goods was selected according to available data. Since data on prices was limited the basket was also limited. Furthermore, the absence of comprehensive budget data has meant that the basket and the weights have been based on rural retail turnover of manufactured goods and processed agricultural products in co-operative trade. This will include purchases made by non-peasants resident in the rural sectors, and those made by organisations such as collective farms.

Secondly, the system of planning in the USSR precludes the functioning of a free market in manufactured goods. Decisions on pricing,

product mix and availability of goods are not made by the market. Therefore, the ability of consumers to maximise their utility in line with the theory is limited.

Unfortunately, there is no adequate means of counteracting these influences on the calculations. But it is believed that the rural retail turnover data is the most representative of spending patterns in this period, and is superior to the total retail turnover data that Chapman used to weight her Moscow price index for 1937 (see chapter on weighting). Furthermore, the basket of goods chosen is regarded as a good approximation of the "typical village assortment" purchased by the peasantry at this time. Its main limitation is that clothing, crockery and hardware have not been included, due to lack of availability of price data. Despite this over 70 per cent of turnover of manufactured goods and processed agricultural produce in co-operative trade is covered.

A further factor in favour of our study is the period of coverage - six to nine years. In terms of the applicability of index number theory a period of this length is regarded as good to tolerable, because it is short enough to enable a relatively constant basket of goods to be chosen. It is usually the case that periods of over 10 years are regarded as seriously misleading, because of the influence of new goods on spending patterns (the problems encountered by Chapman in her 26-year study are even greater). In our case there were no new goods of significance studied. It appears that the peasants had fairly constant needs, and changes that did occur were within the relative expenditure levels on different groups of goods (eg between cloth and clothing).

On the basis of the factors outlined above, it is assumed that the method of obtaining the price indices and the data used in this study provide the best expedient for indicating changes in the prices of selected goods purchased by the peasantry in socialised trade during this period.

We shall now turn to a more detailed examination of the peculiarities of the Soviet market at this time and their effect on the calculation of the price indices.

4.ii The Effect of Multiple Pricing on the Price Indices

One of the other main problems associated with the calculation of a price index for this period (especially 1934-35) is the existence of multiple pricing, which formed an integral part of the rationing system. For, when more than one price exists for the same good in the period of study, the researcher must either make a choice as to which price the social group studied was charged, or devise some method of calculating the average price paid.

This is certainly a difficult problem when attempting to calculate such an index for the urban sector at this time, since both commercial fund and normal fund outlets coexisted in urban retail trade, and the urban working class made purchases in both of them. In the case of the peasantry and rural sector retail socialised trade, however, the pricing and supply systems in operation appear to have solved this problem, for in most cases there was only one channel of supply to the peasantry for each good in rural socialised trade, and only one price was charged. Commercial trade in the rural sector in 1934-36 was virtually non-existent, and the prices of many goods, such as cloth, clothing and footwear, were the same as commercial prices anyway; see Chapter 2 for a more detailed examination of this subject.

On a related topic, the peasants did not confine their spending purely to rural retail socialised trade in 1928 and 1934-37, they also made purchases in the urban sector, where different prices to those prevailing in the village were often charged for the same good. As can be seen from Chapter 3 this has been taken into account by calculating the annual average price, using the rural price weighted by the percentage of purchases made by the peasantry in the rural sector, and the urban price paid by the peasantry weighted by the percentage of their purchases made in the urban sector. Luckily, in nearly all cases the peasants were only charged one price for each good in the urban sector in 1928 and 1934-37. Data limitations do not enable a reasonably accurate breakdown of the percentage of purchases in the urban and rural sectors to be made for separate categories of good.

4.iii The Market Situation and its Effect on the Calculation of the Price and Real Expenditure Indices

As Chapman has already noted,¹ 1928 was a year in which there was a clear divergence between market prices and those charged in socialised trade for the same good. Thus, according to the All-Union "Comparable" Index of the Conjecture Institute in 1928, retail prices in private trade for manufactured goods were approximately 31 per cent higher than those charged in socialised trade.² This indicates the existence of shortages and a divergence between socialised trade prices and those that would ensue if the market was allowed to reach its own level. Chapman³ notes this point and says that in only one year of her study, 1937, did prices in socialised trade approximate to market prices. In the other years, 1928, 1940, 1944, 1948, 1952, 1954, this was not the case. To circumvent this problem Chapman uses an average of socialised and private market prices. Furthermore, she accepts that no attempt can be made to take into account the divergence between official prices of goods that were only sold in socialised trade from those of the free market. This applies mainly to manufactured goods in every year of imbalance, except 1928 (when there was private trade in manufactured goods). This leads her to state that from a theoretical standpoint her procedure is something of an expedient, and it leaves much to be desired even where there is a free market price for the good in question.

The situation is slightly simpler in the case of the study of real expenditure in socialised trade, because only one sector of the retail market is under examination, but the problem of market prices in relation to the indices remains. Unfortunately, there is no adequate method of circumventing this problem. Nevertheless, it is believed that the indices will give a general indication of the change in real expenditure on the goods in question in retail socialised trade, bearing in mind that market prices were probably understated.

Turning now to an examination of the market situation in this period, it is already known that there were shortages in 1928; see above.

In the 1934-37 period, 1934 probably displays the most acute signs of market imbalance. This was a year of full rationing and a multiple pricing system for most goods. As far as working class expenditure on

manufactured goods and processed agricultural produce in socialised trade is concerned, it can be safely concluded that prices paid would have greatly diverged from those determined by the market. This is because rationing and the low prices charged for rationed goods applied mainly to workers in the urban sector.

In the case of the peasantry, however, the situation was slightly different. The peasantry received a very small proportion of the rationed manufactured foodstuffs and processed agricultural produce at ration prices through the otovarivanie system. In fact most of their purchases of these foodstuffs in socialised trade were probably made through the commercial fund at the extremely high commercial prices. In 1934 some form of equilibrium seemed to be forming in commercial trade in foodstuffs, judging by a comparison with free market prices for the same goods. Thus, in Moscow in the first eight months of 1933 market prices of rye bread, wheat bread, meat and butter were 134.0 per cent, 116.5 per cent, 131.6 per cent, and 120.5 per cent respectively of the commercial prices of these goods, but in the same eight months of 1934 these had fallen to 98.5 per cent, 85.0 per cent, 100.5 per cent and 110.3 per cent respectively.⁴

In the case of manufactured non-foodstuffs there are no free market prices to enable a check to be made on their relationship with those in socialised trade. Nevertheless, we may conclude that the prices paid by the peasantry for these goods were probably closer to market prices than those paid by the urban working class. This is because the peasants were not sold these goods at the low ration prices that many workers paid. Instead, full commercial prices were paid in village trade for such goods as cloth, clothing, footwear and knitwear, and when making purchases in the urban sector the peasants were forced to make purchases in commercial trade, because rationed goods were not sold to them.

For 1935-37 the market situation appears to have been much more stable. In this period collective farm market prices had virtually stabilised. The index for the prices of all goods on the collective-farm market was as follows (1932 = 100):

1935	1936	1937
64.6	55.3	62.3

Source: MAL p 402

It also appears that the unitary prices of foodstuffs were close to those prevailing on the market. For example, in May 1935 the price of rye bread on the collective farm market in Moscow and Leningrad was R 2.00/kilo, and R 2.50/kilo in state shops; in Stalingrad the prices were R 1.50/kilo and R 2.20/kilo respectively.⁵ Later in the year prices in socialised trade for grain products, groats, pulses, sugar etc. fell quite substantially; see Appendix B.

This was a period when rationing of the major foodstuffs was abolished. By the end of 1935 75.3 per cent of turnover of state and co-operative trade was accounted for by goods that were not rationed and had unitary prices.⁶ Even before the end of rationing a change was made in retail trading practices and the quantity of goods sold at the extremely low ration prices fell. For example, in the third quarter of 1934 the percentage share of commercial sales of sugar in the market fund was 10.2 per cent and in the third quarter of 1935 this was 62.2 per cent, the percentages for vegetable oil were 9.1 per cent and 17.5 per cent respectively; and for fish products - 13.8 per cent and 43.5 per cent respectively.⁷ Thus, for most of the major foodstuffs it has been assumed that prices in socialised trade from 1935 on were probably close to market prices, and that some form of market equilibrium was established. In the case of manufactured non-foodstuffs, the situation in 1935 for goods with dual prices was the same as that in 1934. The peasants continued to pay the high "village prices at the commercial level". By the end of 1935 only cloth, clothing and footwear were sold at these commercial prices, the rest of this group of goods was sold through the unitary price system - ie the non-rationing system.

Again, the absence of free market prices of manufactured non-foodstuffs does not enable us to make a comparison in order to determine whether prices in socialised trade diverged greatly from these. However, throughout this period the peasants paid the high commercial prices and the even higher unitary prices for these goods, and did not benefit from low ration prices. In this sense it may be said, given the acute shortages for the time, that the prices paid by the

peasants would have been closer to market determined prices than those paid by the urban working class. It is also likely that market conditions, at least for the peasants, were similar throughout 1935-37 and relatively stable in comparison with the earlier period.

The assumption throughout this study is that the goods under examination were available to be purchased by the peasantry. It is clear, however, that the market imbalances and shortages prevailing in 1928-37 would have meant that at different times and in different areas of the USSR many of these goods would have been absent from the shelves of retail outlets. This is a problem that has confronted all studies of inflation in the USSR, since it is impossible to quantify the effect of this on the indices. This needs to be borne in mind when assessing the results of this study, and as a result it gives them an illustrative character.

4.iv. The Effect of Quality Changes on the Price Comparison

Changes in the quality of the goods included in this study need to be assessed, because they have a direct bearing upon our price indices. If, for example, the quality of a good improved over the period while the price remained stable it could be argued that we are not comparing like with like and that the price relationship does not give an accurate representation of changes in welfare, because, in effect, the good with increased quality in the latter period would have been sold at a higher price in the former period. In other words, we have, in effect, a price fall. By the same token, a fall in quality during a period of stable prices would indicate a tendency towards hidden inflation.

It is accepted that it is impossible to quantify the effect of such factors in the Soviet context, because of the lack of data on the period covered. Nevertheless, it is believed that a short study of quality changes is necessary, in order to give an indication of the general trend of their influence on the price comparison.

It appears from a survey of articles written at the time that the quality of the major manufactured goods produced in the Soviet economy, and therefore supplied to the peasantry, began to decline

from 1929, and to recover around 1933-34. For example, the thread count of cotton yarn (a basic indicator of quality) fell from 83 in 1928 to 77 in 1930 and 69 in 1933, and rose to 73 in 1934 (1913 = 100), and the coarseness of cotton cloth increased.⁸ In 1929 a survey carried out by the Workers' and Peasants' Inspection showed that in three trusts in the cotton industry studied, nine factories had levels of brak (substandard goods) ranging from 28-83 per cent of output, instead of a norm of 7-12 per cent.⁹ In the first quarter of 1933 the official level of brak in the cotton industry was 19.4 per cent of output, and in the second quarter - 15.5 per cent.

Complaints of low quality output in the cotton and other industries continued in the mid-1930s: in 1935 complaints were made about the dyeing of cloth, in 1936 one author noted that the hidden brak (krytyi brak) was a great problem in the cotton industry and millions of metres of cloth had been dyed in dark colours to hide imperfections. A survey of trading networks carried out in September and October of the same year showed that 30 per cent of the outlets surveyed were displaying inferior goods (nedobrakokachestvennye tovary).¹¹

Since similar complaints of low quality output were also made about woollen cloth,¹² one would expect the clothing industry also to be affected, because its main raw material consisted of the output of the cotton and woollen industries. This was, in fact, the case. In 1929 one author complained of low quality fabrics and bad workmanship in the sewn goods industry.¹³ Surveys showed that in July 1932 60 per cent of the output of raincoats of the Smirnov factory in Kiev and 63 per cent of output of men's spring/autumn coats was brak and that 87.3 per cent of woollen jackets, 56.5 per cent of woollen trousers and 33 per cent of cotton trousers produced by Factory No 2 in Rostov on the Don was also brak.¹⁴ Even in 1935 a survey of trade showed that bad finishing of pockets, buttons not matching the colour of the fabric and general indifference to the quality of output was common.¹⁵ Sources such as these indicate that the problem of low quality was not an isolated one, but one which affected a large part of the clothing industry.

The situation in the footwear industry seems to have been just as bad. A fall in the quality of boots, shoes and galoshes was

noted in the first quarter of 1928/29.¹⁶ The same source added that even the quality of footwear produced by handcraftsmen in such areas as the North Caucasus was falling. In 1929 it was noted that the low quality of footwear was due to low quality raw materials and bad workmanship, the latter being the main culprit. Galoshes were said to be of particularly bad quality, especially the soles, borders (bordyury), seams and linings.¹⁷ In 1932 a Workers' and Peasants' Inspection study, which included Moscow, Leningrad, the Urals and the Ukraine, showed that whilst a Narkomlegprom survey had set output of the first sort at 75-78 per cent of the total in the factories surveyed, instead of the 90 per cent called for by the plan, in reality, it was much lower. Thus, 25 per cent of the footwear assigned to first sort in an Ukrkomtrest factory was redesignated to second and third sort and even brak.¹⁸

In 1933 it was reported that factories were not sticking to the minimum standards for attaching soles to uppers, and as a result shoes were unusable within a short period of purchase.¹⁹ Writing in 1934 one author noted: "A significant quantity of the footwear we produce has rubber soles. The shoes are good, but the rubber is badly sewn and the shoes quickly spoil".²⁰ As if to contradict the statement that shoes produced around this time were good, another author complained in 1935 that the quality of raw materials used was very low, adding that difficulties were persisting in attaching leather uppers to rubber soles.²¹ Summing up the change in quality of footwear in this period Jasny noted: "..... the output of footwear in 1937 (and other years of the Great Industrialisation Drive) consisted, to a considerable extent, of something which, while footwear, could not be compared with the footwear produced in 1928".²²

There is little mention in the articles written in this period of the other consumer goods. However, it does appear that the quality of such goods as matches, tobacco goods, oils and other foodstuffs began to fall in 1929, and it is likely that these goods would have been affected by low quality raw materials and bad workmanship in the mid-1930s.²³

Apart from the effects of low quality raw materials and a lack of knowledge of production processes on output quality, it also

appears that the goods famine, especially during the rationing period, had its effect. Complaints were made that producers believed that goods of varying quality would always be purchased by a desperate populace. This practice even extended to the producer co-operatives in the early 1930s.²⁴

This section has been presented in order to provide a brief survey of the change in quality of the major manufactured goods produced in 1928-37. It appears from the evidence provided that at least up to 1933-34 the fall in quality was marked, and that the recovery after this date did not restore quality levels to those of 1928. In the light of this one would expect the price comparison to understate the price rise between 1928 and 1934-37, since quality fell. Unfortunately, we are unable to quantify the effect that this would have upon our comparison, but this general assessment should be borne in mind when examining price changes in this period.

4.v. Calculation of the Price Indices

Turning now to the price indices, Table 13 presents the results of the calculations made in Appendix F using the formulas presented at the beginning of this chapter.

It can be seen from the table that the indices are based on four different baskets of goods. Only lines 1 and 2 are based on all of the goods included in the study, and only 1936 and 1937 are covered, due to the absence of price data for fish and melted butter in earlier years. In order to obtain a basket of goods common to all years in the study the maximum sample of goods was taken. This included all of the goods in the study except fish, melted butter and leather footwear. The indices based on this basket are presented in lines 5 and 6. It can be seen that the all-goods and common-sample indices in 1936 and 1937 are extremely close, which suggests that the common-sample indices would have been fairly close to the all-goods indices in 1934 and 1935 had the latter been calculated. To check on the plausibility of this assumption the limited-sample indices were also calculated for 1934, 1936 and 1937. These are also extremely close to the common sample and all goods indices in 1936 and 1937. An advantage of the limited-sample indices is that they also cover 1934. A comparison with those of the common sample shows

Table 13

Indices of Retail Prices for Manufactured Goods and Processed
Agricultural Products Paid by the Soviet Peasantry in Socialised
Trade, 1928, 1934-37

Index	1928	1934	1935	1936	1937
1 All goods (32 items, Laspeyres)	100	na	na	661.9	653.7
2 All goods (32 items, Paasche)	100	na	na	569.8	562.1
3 Limited sample, excluding fish and melted butter (29 items, Laspeyres)	100	534.7	na	654.7	646.2
4 Limited sample, excluding fish and melted butter (29 items, Paasche)	100	452.5	na	564.4	556.4
5 Common sample, excluding fish, melted butter and leather footwear (25 items, Laspeyres)	100	542.4	684.6	661.4	653.0
6 Common sample, excluding fish, melted butter and leather footwear (25 items, Paasche)	100	470.0	594.1	572.4	564.7
7 Manufactured goods, excluding grain products, fish, melted butter and leather footwear (18 items, Laspeyres)	100	548.9	578.3	596.3	588.5
8 Manufactured goods, excluding grain products, fish, melted butter and leather footwear (18 items, Paasche)	100	463.0	489.5	486.4	479.2

Sources: Lines 1, 3, 5 and 7 - taken from Appendix Tables F1, F3, F5 and F7

Lines 2, 4, 6 and 8 - taken from Appendix Tables F2, F4, F6 and F8

a fairly close match in this year. On the basis of this evidence it has been assumed that the common sample indices would also have been close to the all-goods indices in 1934 and that the same relationship would have held in 1935. Thus, in the calculation of real expenditure levels, the common sample indices will be used. It is believed that any inaccuracies introduced into the statistics as a result of this will be small. Finally, lines 7 and 8 present price indices for a common sample of manufactured goods alone. These indices were calculated in order to check whether inflation in the prices of manufactured goods differed to that for processed agricultural products.

From the table it can be seen that the theory regarding the behaviour of a rational consumer during a period of inflation has been borne out. In every case the Laspeyres index number is higher than the Paasche number. Taking the common sample indices, the difference is around

15 per cent throughout this period. This indicates that, in general, the Soviet peasantry did reduce their purchases of those goods that suffered higher levels of inflation relative to those of goods that had lower levels.

However, there were other influences too. Given the nature of the Soviet retail system, this must also have been a part of state supply policy, since it was the state that determined the major part of peasant purchases in socialised trade. Table 14 presents the price relatives calculated in Appendix Tables F1, F3, F5 and F7. It shows that, in general, manufactured foodstuffs and processed agricultural products experienced the highest levels of inflation. Thus, it appears that supply tended to favour non-foodstuffs to foodstuffs, as far as the peasantry were concerned. Furthermore, as noted in chapter two, there was also a tendency for "inferior goods" to appear, ie as the price of a good, such as bread, increased, the quantity purchased increased.

4.vi. Comparison With Other Studies

Table 13 clearly shows that, as far as the peasantry were concerned, there was substantial inflation in the prices of manufactured goods and processed agricultural products in retail socialised trade in 1934-37, compared with 1928. It is interesting to compare these results with those of other studies of the same period to see whether they diverge to any great extent.

Unfortunately, there are no price indices based on expenditure by the peasantry in this period. Price indices relating to all state and co-operative stores in 1937 have been calculated by Chapman, and there is also an official Soviet price index for 1937 state and co-operative trade implied in retail turnover data.²⁵ Table 15 compares these indices with the common sample indices calculated in this study. From the table we can see that the Morrison index (line 1) is approximately 29 per cent below the Chapman index based on 1928 weights and 16 per cent above the Soviet index. The Morrison index in line two is approximately 9 per cent below the Chapman index based on 1937 weights, and 5 per cent above the Soviet index. The Chapman indices are approximately 62 per cent and 16 per cent above the Soviet index.

TABLE 14
Price Relatives 1928, 1934-37

Good	1934	1935	1936	1937
1 Rye flour (95%)	4.82	18.82	13.46	13.27
2 Wholewheat flour (96%)	3.69	14.13	10.88	10.75
3 Rye bread (95%)	7.40	9.30	8.20	8.20
4 Wheat bread (80%)	7.90	9.30	8.10	8.00
5 Ground millet 1st sort	8.47	12.47	10.42	10.37
6 Buckwheat groats	10.14	22.60	20.95	20.90
7 Rice, 1-2 sort	6.41	13.61	10.48	10.48
8 Melted butter	-	-	9.53	9.53
9 Sunflower oil	15.91	20.57	23.96	23.96
10 Sugar, granulated	9.58	7.45	6.30	6.30
11 Sugar, lump	9.90	7.46	5.88	5.88
12 Herring, ordinary	-	-	10.32	10.30
13 Pike-perch	-	-	7.15	7.14
14 Salt	2.50	3.00	4.25	4.50
15 Tea	4.54	8.72	12.31	12.31
16 Vodka	5.19	5.19	5.19	5.19
17 Cigarettes	2.50	2.50	2.50	2.50
18 Smoking makhorka	6.86	7.57	6.00	5.00
19 Matches	2.00	2.00	1.67	1.53
20 Household soap	5.30	5.34	4.74	4.70
21 Paraffin	5.42	5.17	5.42	6.00
22 Thread	3.07	2.93	2.93	2.93
23 Calico	4.73	5.73	5.63	5.24
24 Coarse calico No 40	5.45	6.18	6.76	6.55
25 Moleskin	4.04	4.68	5.35	5.44
26 Woollen cloth	5.03	7.64	10.26	10.29
27 Cotton socks, men's	4.30	4.08	3.62	3.49
28 Galoshes, men's	4.17	4.17	4.20	3.97
29 Boots, men's, black	2.98	-	5.31	5.10
30 Boots ladies'	2.50	-	3.74	3.61
31 Ladies' oxfords	2.91	-	4.46	4.32
32 Children's oxfords	2.50	-	3.64	3.53

Sources: See Appendix Tables F1, F3, F5 and F7

A dash indicates not available

The Chapman indices are substantially above both the indices calculated in this study and the official Soviet index. One possible explanation for this is the fact that Chapman takes her 1937 Moscow price indices and adjusts them in line with the difference between the Moscow and USSR indices observed in 1936 (and assumes no change in the regional price structure between 1936 and 1937).²⁶

Table 15

Comparison Between Morrison, Chapman and Soviet Indices of Prices in Soviet State and Co-operative Trade, Various Sectors, 1937 (1928 = 100)

Indices	1928	1937
1 Morrison common sample index of prices paid by the peasantry in socialised trade (Laspeyres)	100	653.0
2 Morrison common sample index of prices paid by the peasantry in socialised trade (Paasche)	100	564.7
3 Official Soviet index of prices in socialised trade	100	536
4 Chapman index of prices in socialised trade, urban and rural USSR (1928 weights)	100	870
5 Chapman index of prices in socialised trade, urban and rural USSR (1937 weights)	100	621

Sources: Lines 1 and 2 - taken from lines 5 and 6 of Table 1

Lines 3 - 5 - see CHA pp 156-57

As Appendix B shows, Chapman uses the special increased prices for cotton cloth, woollen cloth, leather footwear and galoshes in operation in Moscow from mid-1936 on, to construct her index of Moscow prices. However, she uses the same index as the basis for the USSR price index in 1937, without adjusting the data for the lower prices in operation elsewhere in the USSR (the special increased prices only operated in Moscow, Leningrad, Kiev and Minsk). Since in most cases the difference between the special increased prices and those in operation elsewhere in the USSR were quite substantial, eg in section 23 of Appendix B we see that the special increased price of calico No 6 was R 3.43/metre in 1937, and the corresponding adjusted urban USSR price was R 2.25/metre, this means that the Chapman indices substantially overstate the level of inflation for the basket of goods chosen. (Chapman's study of prices in 1936 also reproduces this error, because she uses SRT-36 as the basis of some of her price calculations and this gives the special increased prices in operation in Moscow at that time.)²⁷

Another possible reason for the divergence between the indices is the different baskets of goods chosen. The Chapman study includes a larger number of both manufactured goods and foodstuffs than the indices calculated above. This is because she concentrated on one city and urban sector data appeared to be more plentiful. This may have influenced her final results.

Differences in weighting systems could also have influenced the indices. In this study the groups of goods are weighted by rural retail turnover data for consumer co-operatives in 1928 and co-operatives in 1934 and 1935, the latter being regarded as a "typical-year" weight for 1936 and 1937. The regional pricing belts are also weighted by the rural retail turnover of the various oblasts, krais and republics in 1934 (see Appendix D and Appendix E). The Chapman study uses retail turnover of socialised trade in 1937, for both the urban and rural sectors, to weight the major groups of goods, and the price belts are weighted by the urban population of the various regions of the USSR in 1939.²⁸ Both methods appear to be inferior to those used in this study. The former includes the expenditure patterns of the rural sector in a study of price changes in the urban sector, and the latter weights each region of the USSR by population without taking into account differences in income distribution, and, more importantly, differences in supply conditions. Both of these pitfalls are avoided by using the rural retail turnover data (of course, there are also problems associated with the representativeness of the 1934 rural retail turnover data and the turnover of rural consumer co-operatives in 1934-35, since these are assumed to be representative for later years, but it is believed that these are not so great as those associated with the Chapman study).

The differences between the Morrison indices and the Soviet index, especially the Paasche index, are not so great. It is not known whether the Soviet index is based on a Laspeyres or Paasche method of calculation, what the basket of goods was or even whether it was an all-sector (ie urban and rural sectors) index. It is known, however that post-1940 Soviet price indices use a given-year formula,²⁹ and if the index in line 3 of Table 15 is also based on a given-year formula then there is a remarkable closeness between this index and the Morrison index in line 2, which uses a Paasche formula. This gives the Soviet index a certain amount of plausibility, and raises doubts

as to whether it "might be considered as the very lowest limit to the rise in retail prices."³⁰

FOOTNOTES

- 1 CHA pp 41-44.
- 2 Dinamika tsen sovetskogo khozyaistva, Moscow 1930, pp 165-66.
- 3 CHA pp 28-29, 42-44.
- 4 VTS p 260.
- 5 Malishev 1936, op.cit p 121.
- 6 Dikhtyar, 1961, op.cit. p 392.
- 7 Sovetskaya trgovlya v novoi obstanovke, 1936, op.cit. p 35.
- 8 G Warren Nutter, Growth in Industrial Production in the Soviet Union, Princeton, New Jersey, 1962, p 72.
- 9 A Grintser, "Voprosy kachestva promyshlennykh izdelii v khozyaistvennom plane na 1929-1930 g.," Puti Industrializatsii No 17-18, 1929, pp 77-78.
- 10 M Epshtein, "Proizvodstvo shirпотреba i sovetskaya trgovlya," Sovetskaya Torgovlya No 6, 1933 p 33.
- 11 See Epshtein, 1933 op.cit. p 32; Ya. Peters, "Kachestvo i assortiment v tekstil'noi promyshlennosti v 1937 g.," Planovoe Khozyaistvo No 2, 1937, pp 60-61; Egorov 1936, op.cit p 99.
- 12 See Nutter, 1962, op.cit. pp 73-74; and Grintser 1929, op.cit. p 83.
- 13 Grintser, 1929 op.cit. p 67.
- 14 G Baron, "Itogi zavoza tovarov i roznichnogo tovaro-oborota potrebkooperatsii za Iyul' i dve dekady Avgusta," Sovetskaya Torgovlya No 2-3, 1932, pp 147-48.
- 15 Sovetskaya trgovlya v novoi obstanovke, 1936, op.cit. pp 55-56.
- 16 A Grintser, "Kachestvo produktsii gospromyshlennosti v nachale 1929-30g.," Puti Industrializatsii No 5, 1930, p 35..
- 17 Grintser, Voprosy kachestva, 1929, op.cit. p 83.
- 18 G Mulyarchuk, "O shirпотреbe," Planovo Khozyaistvo No 4, 1932, p 70.
- 19 Epshtein, 1937, op.cit. p 36.
- 20 V A Nodel', Kolkhoznaya trgovlya khlebom, Moscow, 1934, p 42.
- 21 B Margulis, "Problema syr'ya v kozhevenno-obuvnoi promyshlennosti", Planovoe Khozyaistvo No 8, 1935, pp 45-46.

- 22 N Jasny, Soviet Industrialisation 1928-1952, Chicago, 1951, p 165.
 - 23 Grintser, Voprosy kachestva, 1930, op.cit. p 84.
 - 24 Sen'ko, 1933, op.cit. p 92.
 - 25 CHA p 157.
 - 26 CHA pp 89-90.
 - 27 JC-50 pp 72-84.
 - 28 CHA pp 69-86, 88-90.
 - 29 CHA pp 156-57.
 - 30 CHA p 157.
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Money and Real Expenditure Levels

This chapter presents the findings on the peasantry's expenditure in socialised trade on manufactured goods and processed agricultural products. The analysis begins by obtaining money expenditure figures for peasant households in 1928 and 1934-37, using a comparable regional sample. The figures are broken down into manufactured goods and manufactured goods and processed agricultural products, so as to obtain two sets of indices. Then the indices of money expenditure and the price indices in chapter 4 are used to calculate real expenditure levels throughout this period. Finally, physical consumption of manufactured goods by the Soviet peasantry in 1928 is examined in order to give an indication of the effect on physical consumption levels of the change in real expenditure on these goods in 1934-37.

5.i. Obtaining Comparable Money Expenditure Data, 1928

The study uses budget data for peasant farms collected by TsSU in the 1920s and TsUNKhU budget data for collective farmers collected in 1934-37 as the basis for the comparison of expenditure levels. The comparability of the data occupies an important place in our study, for it has to be determined that we are comparing like with like. This has two aspects: comparability of the basic economic units used as the basis of the budget studies (peasant households), and comparability of the regional samples used in both periods.

In the case of peasant households, it has been assumed in the study that the average household had the same number of members in each period. This is important, because when expenditure per household is compared, it is possible for changes in the total to occur as a result of changes in the number of members of that household. Since constant expenditure per head is implied when we assume a constant number of members, we must ensure that such changes did not occur. It appears from rough data presented by Soviet and Western researchers that the number of members per peasant household was between five and six in 1928 and 1934-37.¹ In fact this data shows an increase in

the number of members per household from 5.02 in 1928 to 5.89 in 1937. However, the Karcz estimates and the Soviet data on the number of households are not reliable enough to enable us to adjust our expenditure data in line with this. Thus, the assumption of a constant number of members per household still stands.

Turning now to the comparability of the regional samples used as the basis for the budget studies, it is necessary to collect budget data relating to similar areas of the USSR, otherwise the validity of the study will be called into question. Appendix G compares the two sets of budget studies. The 1934-37 studies have been used as the basis of comparison, because the data for this period is much less detailed than that for the late 1920s, and the sample of regions that comprised the basis of the budget data changed during this period. Thus, in 1934 the budgets of peasants living in eight oblasts, krais and republics of the USSR were studied, in 1935-37 this was extended to 13 oblasts, krais and republics, and in 1937 an alternative 28 oblast study was also carried out (it is possible that a 27 oblast study may have been carried out at some point in 1936 as well, see Appendix G).

No regional breakdown of the aggregate data was given for the 1934-37 studies, which means that we are faced with a fixed regional sample for this period. This is complicated further by the fact that the main sources, two works by M Nesmii: "Dokhody kolkhozov i kolkhoznikov," in Planovo Khozyaistvo No 9, 1937, and Dokhody i finansy kolkhozov, Moscow 1940, do not provide a comprehensive list of the oblasts, krais and republics of the USSR included in the study.

Appendix G attempts to solve this problem by listing all of the areas quoted in the available sources on the budget studies and cross-referring them. This has provided a tentative list of seven of the eight oblasts, krais and republics studied in 1934, and all of the areas included in the 13 and 28 oblast, krai and republic studies. These areas are as follows (see Appendix Table G2):

1 Moscow Oblast, 2 Leningrad Oblast, 3 Orenburg Oblast, 4 Sverdlovsk Oblast, 5 Western Oblast, 6 Kuibyshev Krai, 7 West-Siberian Krai, 8 Dnepropetrovsk Oblast, 9 Odessa Oblast, 10 Voronezh Oblast, 11 Belorussian SSR, 12 Azov-Black Sea Krai, 13 Kiev Oblast, 14 Uzbek SSR,

15 Rostov Oblast, 16 Krasnodar Krai, 17 Saratov Oblast, 18 Turkmen SSR, 19 Tadzhik SSR, 20 Karelian SSR, 21 Kirov Krai, 22 Kalinin Oblast, 23 Vinitza Oblast, 24 Georgian SSR, 25 Armenian SSR, 26 Azerbaidzhan SSR, 27 Kabardino-Balkar ASSR, 28 Volga-German ASSR. Areas 1-7 are included in the eight oblast study of 1934, 1-13 are included in the 13 oblast study of 1935-37, and all of the areas are included in the 28 oblast study of 1937. It is assumed that the eighth area in the 1934 study is included in this list, but it was not possible to identify it. The absence of this area from the comparison with 1934 may introduce some unavoidable inaccuracies into the data.

Given the fixed regional sample for 1934-37, it was necessary to adjust the budget data for the late 1920s to make this comparable, on a regional basis, with the former, because expenditure levels differed between the various areas of the USSR throughout this period. The comparison uses 1928 as the base. Unfortunately, the 1928 TsSU peasant budget data - published on a monthly basis in SO in 1928-29 - does not give a regional breakdown of the aggregate data for the whole of the year. For seven months of that year aggregate figures for consumer areas - North-Eastern Raion, Leningrad Oblast and Karelian ASSR, Western, Central-Industrial and Vyatka Raions - and producer areas of the RSFSR - Central Black-Earth Raion, Urals Oblast, Bashkir ASSR, Middle and Lower Volga Raions, Crimean ASSR - were given. Only North Caucasus Krai, Belorussian SSR and Ukrainian SSR were given individual coverage for the whole year; see Appendix Table I2. A second-best solution has been sought by giving both the aggregate data for consumer and producer areas when these are covered in the 1934-37 studies, and the aggregate data, weighted by the rural population in 1928, of the areas within this that are covered by the 1934-37 studies, eg in the 1928-34 comparison, the consumer area data was weighted by the rural population in that year of Leningrad Oblast, Western Raion and Central-Industrial Raion, because the 1934 study included parts of these areas.

It is accepted that there are doubts with regard to the degree of comparability that can be achieved by using the above methods, so as an alternative, aggregate USSR data for 1928, covering the RSFSR, and Ukrainian and Belorussian SSRs, has also been given, and the 1927 budget data has been reworked using regional samples broadly

comparable with those of 1934-37 and adjusted in line with the increase in expenditure for aggregate USSR data in 1927-28; see Appendix Table II2 . In the latter case, the data is broken down into the following areas: Far Northern, Northern, North-Western, Western, Moscow-Industrial and Central Agricultural Raions, Urals Oblast, Bashkir-Orenburg Okrug, Volga and Volga-Kama Raions, North Caucasus Krai, South-Western Siberia, Belorussian SSR and Ukrainian SSR (these raions were quoted for the first nine months of 1927; in the last three months the raions were changed, but the same area of the USSR was covered).

The adjusted 1927 data probably provides the best available regional comparison between 1928 and 1934-7. The comparison will not be exact, however, because the statistical regions used in 1927 were much more extensive than those in 1934-37; see Appendix G . Unfortunately, it was not possible to adjust the results to counteract this, because of a lack of data.

Table 16 below presents this study's findings regarding income and expenditure in 1928. In the table, line 1 presents the unadjusted data for all of the areas in the USSR study. Lines 2a, 4a and 6a present the budget data for 1928, including producer and consumer areas with aggregate weights (ie wherever an area in the 1934-37 studies is covered by the producer and consumer areas in 1928, the aggregate weight for the latter is given), and lines 2b, 4b and 6b present the aggregate data weighted by the rural population in 1928 of the areas covered in 1934-37. Finally, lines 3, 5 and 7 present the 1927 budget data for areas roughly corresponding to those in the 1934-37 studies, and adjusted in line with the general increase in income and expenditure between 1927 and 1928.

The table shows that the data corresponding to the 1934 sample (lines 2a-3) produce the highest income and expenditure data of all. It appears that this is because the limited sample in the 1934 study tended to concentrate on the areas that were more prosperous in the 1920s. Comparison between the data corresponding to the 13 oblast and 28 oblast studies (lines 4a-5, and 6a-7 respectively) is not so clear cut. The 1928 studies show lower income and expenditure data for the 13 oblast sample than for the 28 oblast. It is only the adjusted 1927 data that shows the reverse. It is possible that this is due to the 13 oblast sample being concentrated on areas with lower

Table 16

Income and Expenditure of the Soviet Peasantry, 1928, Average USSR
and Comparable Regional Samples with 1934-37 Studies (rubles/household)

	Total income	Total expenditure	on flour & groats	of which on manufact goods	cols 3 & 4
	1	2	3	4	5
1 Average USSR 1928	514.52	512.12	25.86	199.51	225.37
2a 1928-34 comparison aggregate weights	513.43	512.43	34.69	202.30	236.99
2b 1928-34 comparison given-raion weights	528.59	527.18	38.06	208.99	247.05
3 1928-34 comparison, adjusted 1927 data	530.41	528.88	44.06	213.28	257.34
4a 1928-1935/37 13 oblast comparison aggregate weights	504.92	501.64	27.61	194.80	222.41
4b 1928-1935/37 13 oblast comparison given-raion weights	504.50	500.81	26.69	194.01	220.70
5 1928-1935/37 13 oblast comparison adjusted 1927 data	511.31	503.02	26.76	195.57	222.33
6a 1928-37 28 oblast comparison aggregate weights	508.41	505.04	28.01	196.13	224.14
6b 1928-37 28 oblast comparison, given raion weights	508.40	504.89	27.69	194.01	223.59
7 1928-37 28 oblast comparison adjusted 1927 data	503.08	494.86	26.46	193.92	220.38

Sources: Line 1 is from Appendix Table I1

Lines 2a and 2b: are from Appendix Table I4

Lines 3, 5 and 7 are from Appendix Table I13

Lines 4a and 4b are from Appendix Table I5

Lines 6a and 6b are from Appendix Table I6

income and expenditure on average than the 28 oblast study. Certainly, Table 17 (see below) shows that the 28 oblast study produced higher income and expenditure figures for 1937 than did the 13 oblast study. However, this may also be due to the rough method used to weight the 1928 data. Of the four different sets of figures given in the table, the adjusted 1927 data is regarded as the most accurately matched to the 1934-37 data, and this will be used in the comparisons. The table shows that this will give the lowest index of the studies when comparison is made with 1934 (1928 = 100), an index close to the others when a comparison is made with the 1935-37 13 oblast data, and the highest when comparison is made with the 1937 28 oblast data. In fact, expenditure data corresponding to 1935-37 is so close, the use of any of the sets of figures presented in Table 16 would not have made a substantial difference to the findings. It is only in the case of 1934 that this is not the case.

5.ii. Money Expenditure in 1934-37

Table 17 below presents the money expenditure of collective farmers in 1934-37.

Table 17
Money Expenditure of Collective Farmers, 1934-37, Various
Regional Samples (rubles/household)

	1	2 of which on	3	4
	Total expenditure	manufact.goods	flour & groats	Cols 2 & 3
1 1934 (8 oblast)	949.5	317.1	101.1	418.2
2 1935 (13 oblast)	1043.5	380.3	94.4	474.7
3 1936 (13 oblast)	1287.7	498.9	106.4	605.3
4 1937 (13 oblast)	1612.2	668.5	123.2	791.7
5 1937 (28 oblast)	1768.1	678.7	154.2	832.9

Source: Appendix Table J1

The table shows that expenditure on manufactured goods and processed agricultural products (flour and groats) almost doubled between 1934 and 1937, when comparison is made between the 1934 eight oblast and the 13 oblast and 28 oblast studies for 1937. It should be borne in mind that, as the notes to Appendix Table J1 point out, the figures for 1934 are based on percentage changes between 1934 and 1935.

Column 2 is also computed using percentage changes, and column 3 is based on a constant 23.2 per cent of expenditure on agricultural products (the percentage observed in 1928, see note to col 5 of Appendix Table J1).

5.iii. Comparison Between Money Expenditure Levels 1928 and 1934-37

Turning now to a comparison between expenditure in the 1928-37 period, Table 18 below presents the results. Column 5 of the table is based on the following percentages of total expenditure on manufactured goods assumed to be made in socialised trade: 1928 - 84.2 per cent; 1934 - 81.5 per cent; 1935 - 81.5 per cent; 1936 - 86.1 per cent; 1937 - 84.3 per cent.² It is assumed that the remainder of expenditure was made through private sales in private trade in 1928 and bazaars in 1934-37, since officially private trade did not exist in this period, and through exchange between individuals. It is likely that a large proportion of the goods sold through these alternative channels originally entered the market through socialised trade.

As we can see from cols 5 and 7 of Table 18 the indices of money expenditure on manufactured goods and processed agricultural products are fairly close, whether all trade or just the socialised sector is being examined. This is because the percentages of expenditure made in the socialised sector throughout this period were fairly close; see above.

The indices show substantial rises throughout the period. Thus, the 1928-34 comparison gives indices of 162.5 and 157.3 (expenditure made in all sectors and socialised trade respectively, 1928 = 100); the indices for 1935 are 213.4 and 206.6; for 1936-272.2 and 278.4; for 1937 (13 oblast study) - 356.0 and 356.5; and 1937 (28 oblast study) - 377.9 and 378.4. Of the two 1937 studies it is assumed that the 28 oblast variant which gives significantly higher indices, is the more reliable because it has more extensive coverage.

Finally, as an alternative to the expenditure data on manufactured goods and processed agricultural products, we shall also take an index of expenditure in socialised trade on manufactured goods alone. Table 19 below presents the working. This index is calculated in order to provide a check on the accuracy of the data which includes processed agricultural products (flour and groats), since expenditure on the latter is based on the percentage in 1928 of expenditure on agricultural products devoted to flour and

Table 18

Money Expenditure on Manufactured Goods and Processed Agricultural Products, 1928,
1934-37, in All Trade and Socialised Trade (rubles/dvor)

	1	2	3	4	5	6	7
	Total expenditure	manufactured goods	of which on flour and groats	col 2 & col 3	Index in socialised trade on manufact. goods, flour and groats		Index
1 1928 (adjusted 1927 data based on 1934 sample)	528.88	213.28	44.06	257.34	100	216.68	100
2 1934 (8 oblast)	949.5	317.1	101.1	418.2	162.5	340.8	157.3
3 1928 (adjusted 1927 data based on 13 oblast 1935-37 sample)	503.02	195.57	26.76	222.41	100	187.27	100
4 1935 (13 oblast)	1043.5	380.3	94.4	474.7	213.4	386.9	206.6
5 1936 (13 oblast)	1287.7	498.9	106.4	605.3	272.2	521.2	278.4
6 1937 (13 oblast)	1612.2	668.5	123.2	791.7	356.0	667.4	356.5
7 1928 (adjusted 1927 data based on 28 oblast 1937 sample)	494.86	193.92	26.46	220.38	100	185.56	100
8 1937 (28 oblast)	1768.1	678.7	154.2	832.9	377.9	702.1	378.4

Sources: Lines 1, 3 and 7 are taken from lines 3, 5 and 7 of Table 16

Lines 2, 4, 5, 6 and 8 (cols 1, 2 and 3) are taken from Table 17. Column 6 of these lines
is taken from Appendix Table J2.

Table 19
Expenditure on Manufactured Goods by the Soviet Peasantry in All Trade
and in Socialised Trade, 1928, 1934-37 (rubles/dvor)

	1 Expenditure in all trade on manufact. goods	2 Index	3 Expenditure in socialised trade on manufact. goods	4 Index
1 1928 (adjusted 1927 data, based on 1934 sample)	213.28	100	179.58	100
2 1934 (8 oblast)	317.1	148.7	258.4	143.9
3 1928 (adjusted 1927 data, based on 13 oblast 1935-37 sample)	195.57	100	164.67	100
4 1935 (13 oblast)	380.3	194.5	310.0	188.3
5 1936 (13 oblast)	498.9	255.1	429.6	260.9
6 1937 (13 oblast)	668.5	341.8	563.6	342.3
7 1928 (adjusted 1927 data, based on 28 oblast 1937 sample)	193.92	100	163.28	100
8 1937 (28 oblast)	678.7	350.0	572.1	350.4

Sources: Column 1 is column 2 of Table 18

Column 3 is column 1 adjusted by the following percentages of expenditure on
manufactured goods made in retail socialised trade: 1928 - 84.2%; 1934 - 81.5%;
1935 - 81.5%; 1936 - 86.1%; 1937 - 84.3%

groats; see above. . Comparison with the indices in Table 18 shows that the increase in expenditure on manufactured goods either in all trade or in socialised trade was significantly below that for manufactured goods and processed agricultural products. This is because expenditure on agricultural products increased by more than the average over this period, presumably because a smaller part of their harvest was left for the personal consumption of the peasants in the 1930s than in the late 1920s; see Appendix E .³

5.iv Real Expenditure in 1928 and 1934-37

Having calculated the indices of the peasantry's money expenditure on manufactured goods and processed agricultural products in retail socialised trade, and also price indices for the same goods in socialised trade, it is now possible to calculate the indices of the peasantry's real expenditure on manufactured goods and processed agricultural products in socialised trade. Table 20 presents the findings.

Lines 4 and 5 of the table present the indices of real expenditure on manufactured goods and processed agricultural products using the limited sample Laspeyres and Paasche price index formulas. Both show a substantial fall in real expenditure on these goods throughout 1934-37 (taking 1928 as the base year). Thus, in 1934 real expenditure on these goods made by the peasantry in socialised trade fell by between 71 per cent and 66 per cent, depending on whether the Laspeyres or Paasche formula is used. In 1935 there was a slight improvement according to the table, and the fall was between 70 per cent and 65 per cent. The improvement continued in 1936 and 1937, the percentage falls being between 58 per cent and 51 per cent in 1936, and either 45 per cent and 37 per cent according to the 13 oblast study in 1937 or 42 per cent and 33 per cent according to the 28 oblast study for the same year. Whilst these figures cannot be regarded as giving an estimate of the fall in real expenditure on these goods which has pin-point accuracy, they suggest that the fall in comparison with 1928 was in the region of 70 per cent in 1934, around 67 per cent in 1935, around 55 per cent in 1936 and near 40 per cent in 1937 (these percentages are given as rough indicators of the extent of the fall).

Table 20
Indices of the Peasantry's Real Expenditure on Manufactured Goods and Processed
Agricultural Products in Retail Socialised Trade, 1934-37 (1928 = 100)

	1928	1934	1935	1936	1937 ^a	1937 ^b
1	Index of money expenditure on manufactured goods and processed agricultural products (adjusted 1927 data)	100	157.3	206.6	278.4	356.5 13 oblast 28 oblast
2	Index of prices paid by the peasantry for manufactured goods and processed agricultural products in socialised trade (Laspeyres, limited sample)	100	542.4	684.6	661.4	653.0 653.0
3	Index of prices paid by the peasantry for manufactured goods and processed agricultural products in socialised trade (Paasche, limited sample)	100	470.0	594.1	572.4	564.7 564.7
4	Index of real expenditure on manufactured goods and processed agricultural products (Laspeyres, line 1 ÷ line 2, x 100)	100	29.0	30.2	42.1	54.6 58.0
5	Index of real expenditure on manufactured goods and processed agricultural products (Paasche, line 1 ÷ line 3, x 100)	100	33.5	34.8	48.6	63.1 67.0
6	Index of money expenditure on manufactured goods (adjusted 1927 data)	100	143.9	188.3	260.9	342.3 350.4
7	Index of prices paid by the peasantry for manufactured goods in socialised trade (Laspeyres, limited sample)	100	548.9	578.3	596.3	588.5 588.5
8	Index of prices paid by the peasantry for manufactured goods in socialised trade (Paasche, limited sample)	100	463.0	489.5	486.4	479.2 479.2
9	Index of real expenditure on manufactured goods (Laspeyres, line 6 ÷ line 7, x 100)	100	26.2	32.6	43.8	58.2 59.5
10	Index of real expenditure on manufactured goods (Paasche, line 6 ÷ line 8, x 100)	100	31.1	38.5	53.6	71.4 73.1

Sources: Line 1 is based on column 7 of Table 18
lines 2, 3, 7 and 8 are taken from Appendix Tables F1 - F8
Line 6 is taken from column 4 of Table 19

As a final check on the accuracy of these indices Table 20 also presents in lines 9 and 10 indices of real expenditure on manufactured goods made by the peasantry in socialised trade in the same period. By excluding flour and groats from the calculation of the index it is believed that an index of real expenditure will be obtained that is free from possible inaccuracies resulting from assumptions regarding the actual level of money expenditure on processed agricultural products. From the table it can be seen that the indices are fairly close to those for manufactured goods and processed agricultural products, being within 6.1 percentage points of the latter. They show that real expenditure on manufactured goods fell by between 74 per cent and 69 per cent approximately in 1934 (in comparison with 1928). Again there was a slight improvement to between 67 per cent and 61 per cent in 1935, and this continued in 1936 and 1937, with a fall in relation to 1928 of between 56 per cent and 46 per cent in 1936, and 42 per cent and 29 per cent according to the 13 oblast study in 1937, or 40 per cent and 27 per cent according to the 28 oblast study for the same year. This suggests that the fall in relation to 1928 was around 70 per cent in 1934 and 65 per cent in 1935, 50 per cent in 1936 and around 35 per cent in 1937 (as opposed to falls of around 70 per cent and 67 per cent in 1934 and 1935, 55 per cent in 1936 and 40 per cent in 1937 according to the data on real expenditure on manufactured goods and processed agricultural products).

5.v. Real Expenditure by the Soviet Peasantry and its Relationship to Physical Consumption Levels of Manufactured Goods

The study has examined real expenditure on manufactured goods and processed agricultural products by the Soviet peasantry in retail socialised trade in 1928 and 1934-37. Since purchases in socialised trade made up over 80 per cent of the peasantry's purchases of these goods in all sectors of trade, it seems safe to assume that the substantial falls in real expenditure revealed in this study also indicate similar falls in physical consumption of these goods. Thus, in order to put the findings in context and get an idea of the level of deprivation suffered by the peasantry as a result of the fall in real expenditure, data on physical consumption of manufactured goods

in the base year of the study, 1928, should also be presented (data on physical consumption of these goods in 1934-37 has not been released).

Table 21 below gives the average consumption norm per head of the rural population for some of the major manufactured goods in 1927/28 and compares this with the norm for the urban population. Column 3 of the table gives the rural norm as a percentage of that for the urban sector. From column 1 it can be seen that the rural population's consumption of such goods as footwear, cloth, sugar and tea was extremely low in the early part of the study. Thus, on average 0.12 pairs of galoshes were consumed per annum in 1927/28, and 0.24 pairs of leather footwear, and approximately 100 gms of tea, 2 kilos of vegetable oil and less than 5 kilos of sugar were consumed on average per annum. These clearly indicate the subsistence level of consumption of goods such as these in the rural sector at this time.

Two goods stand out as having relatively high levels of consumption - cotton cloth and salt. In the case of salt this can be explained by the peasantry's use of this product in processing agricultural products, eg curing meat and preserving vegetables. Salt was also the cheapest manufactured foodstuff sold at this time, ie, the peasants could afford to consume a fairly large quantity of it. Cotton cloth is slightly different. In this case the peasants used the cloth to make their clothing (they bought a very small quantity of made-up clothing). So what is seen in this case is virtually the total meterage of cloth devoted to the peasant's consumption of cloth and clothing.

From column 3 of the table an impression is obtained of just how low the average rural dweller's consumption of these goods was in relation to that in the urban sector. Consumption of galoshes, leather footwear, sugar and tea was less than 30 per cent of that of the average urban dweller. That of woollen cloth - 33.6 per cent, and vegetable oil, cotton cloth and matches - 53-61 per cent approximately. Only in the case of salt and makhorka did rural consumption levels either exceed those of the urban sector or come

Table 21

A Comparison Between Rural and Urban Consumption Norms per Head
of Selected Manufactured Goods,
1927/28 (per annum)

	Unit of measurement	Rural norm	Urban norm	Col 1 as % of col 2
		1	2	3
Sugar	kilo	4.7	16.81	28.0
Vegetable oil	"	2.06	3.87	53.2
Salt	"	12.0	7.0	171.4
Tea	"	0.101	0.429	23.5
Makhorka	"	0.55	0.56	98.2
Matches	boxes	21-23	35-37	61.1 (average)
Cotton cloth	metres	13.4	23.5	57.0
Woollen cloth	"	0.51	1.52	33.6
Leather footwear	pairs	0.24	0.88	27.3
Galoshes	"	0.12	0.60	20.0

Source: A Vydrina, N Druzhinin, A Chernavin, V Shumilin,
Potreblenie promyshlennykh tovarov (k probleme
izucheniya emkosti rynka po raionam SSSR),
Moscow 1930, pp 110-23.

near to them. The reasons for the high consumption level of salt by the peasantry have already been explained. Makhorka was a low grade type of tobacco, and it is likely that consumption of this good was low in the urban sector, consumers preferring to smoke the higher-grade pipe tobacco and cigarettes.

In the light of this data, and given that the bulk of these products must have been purchased by the peasantry through socialised trade and that they could not have supplemented this by self-production, it may be concluded that the Soviet peasantry consumed extremely small quantities of the major manufactured goods in the base-year of the study.

FOOTNOTES

- 1 Calculated from percentage collectivisation data presented by Laptev, 1939, op.cit. p 14, and population estimates given by Karcz, 1979, op.cit., p 479.
 - 2 Barsov, 1969, op.cit. p 27, and Nesmii, 1940, p 65, see Appendix J.
 - 3 See David John Morrison, The Effect of Falling Livestock Numbers upon Soviet Grain Marketings and Procurements in the 1928-38 Period, in Jahrbuch der Wirtschaft Osteuropas, Band 10, 1. Halbband, 1982, pp 239-51, which shows that the increase in marketings of the main food crop, grain, was made as a result of falling livestock numbers and the peasantry's falling personal consumption.
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CONCLUSION

This study concentrates on the peasantry's real expenditure on manufactured goods and processed agricultural products in retail socialised trade in 1934-37 (using 1928 as a base-year for comparison). Researchers have long assumed that the peasantry's real expenditure on these goods fell substantially during this period and that this was accompanied by inflation in retail prices. Their work in this area, however, has been hampered by a lack of reliable information on the size of these changes. This thesis has attempted to fill this gap in knowledge.

It can be seen from the extensive appendices, which comprise most of this thesis, that the lack of reliable Soviet data on this subject has meant that various short cuts and estimates have had to be made and second-best alternatives chosen when calculating real expenditure. Consequently, it cannot be claimed that the calculations made have the property of pin-point accuracy. Rather, it should be assumed that they have an approximate character, and, until the Soviet authorities release archive data on the subject, are probably the best indicator available of the peasantry's real expenditure on manufactured goods and processed agricultural products in socialised trade.

The highly detailed calculations presented above provide evidence to support the view that throughout 1934-37 the Soviet peasantry suffered a substantial fall in their real expenditure in socialised trade on manufactured goods and processed agricultural products when comparison is made with 1928, the last pre-collectivisation year. When Laspeyres and Paasche price indices, based on a common sample of 25 goods, are used to deflate the money expenditure data provided by the budget studies, it is calculated that the peasantry's real expenditure on these goods in socialised trade fell in 1934 to approximately 29 per cent of its 1928 level if the Laspeyres index is used, or 34 per cent if the Paasche index is used. From then on a gradual recovery began: in 1935 there was a slight rise in real expenditure to 30 per cent of its 1928 level using the Laspeyres index and 35 per cent using the Paasche; in

1936 a jump to 42 per cent and 49 per cent respectively; and in 1937 a further substantial rise to 55 per cent and 63 per cent respectively if the data from the 13 oblast budget study is used, or 58 per cent and 67 per cent respectively if the 28 oblast study is used. In the case of manufactured goods alone, excluding processed agricultural produce (grain products), the situation was also similar: real expenditure by the Soviet peasantry in retail socialised trade fell in 1934 to 26 per cent of its level in 1928 if a Laspeyres index is used, and 31 per cent if the Paasche is used; in 1935 the respective figures are 33 per cent and 39 per cent of the 1928 level; in 1936 - 44 per cent and 54 per cent; and in 1937 - 58 per cent and 71 per cent if the 13 oblast budget data is used, or 60 per cent and 73 per cent if the 28 oblast data is used. The implication of these findings is that the peasantry's real expenditure on manufactured goods and processed agricultural products in all sectors of retail trade fell substantially in the period surveyed, because they consistently made over 80 per cent of their purchases of manufactured goods in socialised trade in 1928 and 1935-37.

In order to deflate money expenditure data the thesis has presented an in-depth analysis of the level of prices and the system of pricing. On the basis of evidence provided by pricing handbooks for various areas of the USSR in 1934-37 it is possible to reach a number of tentative conclusions concerning the pricing system in this period.

In 1934-36:

- only a small number of rationed, normal fund, goods were sold in the village at the relatively low ration prices and these were foodstuffs sold under the otovarivanie system;
- full commercial sales of goods, at relatively high commercial prices, were virtually non-existent in the village and were concentrated almost exclusively in the town;
- manufactured goods such as cloth, clothing and footwear sold in the village at prices "at the commercial level" had prices that were identical with the high commercial prices charged in the town, and this was in fact the only channel of supply of these manufactured goods to the peasantry in village retail socialised trade;

- rationed supplies of manufactured goods at the relatively low ration prices were concentrated in the town and this channel of supply was closed to the peasantry;
- purchases made by the peasantry in socialised trade in the town were confined almost exclusively to commercial trade;
- other channels, such as goods sold at "average increased prices", "Torgsin" goods etc, had either been abolished before 1934, did not apply to the peasantry, or accounted for such a small proportion of turnover of retail socialised trade that they were of relatively no significance.

In 1935-37:

- the rationing system, and with it the system of discriminatory pricing, began to be gradually abolished, beginning with processed foodstuffs and extending to manufactured non-foodstuffs;
- by the end of 1935 only cloth, clothing and footwear still had discriminatory prices and these were abolished in early 1936;
- the unitary price system which superseded that of rationing did provide for different prices to be charged for the same good between regions and between town and country, but it appears that in the latter case the difference was more a reflection of relative trading costs than one of discrimination against the peasantry;
- an exception to this case, not recognised by a Western researcher working on Moscow prices in 1937, was the introduction of special increased prices for cloth, clothing and footwear in retail socialised trade in Moscow, Leningrad, Kiev and Minsk in mid-1936, and the continuation of these prices throughout 1937.

Turning to the indices of prices paid in retail socialised trade by the peasantry for manufactured goods and processed agricultural products, they do not show a continuous ascent from 1934 to 1937. They show that prices rose substantially between 1928 and 1934, peaked in 1935 and fell slightly in 1936 and 1937. Thus, the indices using a common sample of 27 goods, reached 542.4 in 1934 (1928 = 100) using a Laspeyres formula, and 470.0 if a Paasche formula is used; in 1935 the respective indices are 684.6 and 594.1; in 1936 - 661.4 and 572.4; and in 1937 - 653.0 and 564.7. If a limited common sample of 18 manufactured goods, which excludes processed agricult-

ural products (grain products), is used we obtain price indices for 1934 (1928 = 100) of 548.9 using the Laspeyres formula and 463.0 if the Paasche is used. In 1935 the respective indices were 578.3 and 489.5; in 1936 - 596.3 and 486.4; and in 1937 - 588.5 and 479.2.

Comparison between the two series of price indices indicates that the introduction of unitary prices for processed agricultural products in 1935, and subsequent changes in these prices, contributed substantially to inflation at this time, for the indices which include these products are much higher than those that do not. Furthermore, the indices for manufactured goods alone show a linear rise from 1934 to a peak in 1936 if the Laspeyres formula is used, and a peak in 1937 preceded by a slight fall in 1936, relative to 1935 if the Paasche formula is used. In all cases, however, the indices show a substantial rise in prices charged to the peasantry in retail socialised trade between 1928 and 1934-37.

The Laspeyres and Paasche indices calculated in this study show that the tendency for consumers to switch purchases from relatively more expensive goods to relatively cheaper goods during a period of inflation was also borne out by the practice of the Soviet peasantry in this period. In all cases the Laspeyres indices are substantially above those of the Paasche, which is what one would expect given that the former were weighted by quantities purchased in 1928 and the latter either by quantities purchased in 1934 or in the "typical year" of 1935. This was slightly complicated by the fact that the Soviet retail market was not free at the time, but it appears from the consistency of the relationship between the indices that consumer choice must have exerted a substantial influence on this.

The indices presented above shed some of the doubts concerning the accuracy of the only known Soviet index number of retail prices in 1937 (using 1928 as a base year), and cast doubt on the accuracy of one of the major Western estimates of inflation between 1928 and 1937 - Janet Chapman's study. For, if it is assumed that the implied Soviet index number of 536 (1928 = 100) for prices of all goods in all retail socialised trade is a Paasche-type index, which certainly was the method used from 1940 onwards, then it is fairly close to the Paasche index calculated in this study for manufactured goods

and processed agricultural products in 1937 of 564.7. Bearing in mind, however, that the latter did not examine all goods and confined itself to purchases made by the peasantry, we can only be assured that the Soviet index does not look wildly improbable. This is also reinforced by the observation that a Paasche index of prices of manufactured goods and processed agricultural products in both the urban and rural sectors in 1937 would have been above 564.7, due to the special increased prices for cloth, clothing and footwear introduced in Moscow, Leningrad, Kiev and Minsk in mid-1936, but the difference would not have been substantial, since in the rest of the USSR the prices of most manufactured goods and processed agricultural products were similar in both urban and rural sectors in 1928 and 1937.

The indices calculated in this study are substantially below those of the most detailed and systematic Western study so far of inflation in the USSR in this period - that of Janet Chapman. Chapman obtains indices of retail prices in all socialised trade of 870 using 1928 weights (1928 = 100); and 621 using 1937 weights. We may conclude from the analysis presented in this study that these indices substantially overestimate the extent of inflation because of Chapman's reliance on the special prices introduced in Moscow from mid-1936 on as the basis of her calculation of all-union prices. Thus, whilst the study shows that there was substantial inflation in the prices paid by the peasantry for manufactured goods and processed agricultural products between 1928 and 1934-37, it also shows that the level of inflation in the prices of these goods implied by Chapman's figures, is itself inflated through inaccurate price calculations.

APPENDIX A

Retail Prices in Socialised Trade, 1928

This appendix presents the collected data on urban and rural prices for the basket of goods in the study in 1928. Appendix Table A1 presents the data collected so far. In each column of the table (except column 2) the rural sector price is given in column (a), and the urban sector price in column (b). The key to the table is as follows:

Column 1: These are average retail prices of rural consumer co-operatives, covering a representative sample for the whole USSR of 2,700 outlets, in the first half of 1928. The prices were collected by the Central Union of Consumer Co-operatives (Tsentsosoyuz).¹

Column 2: Average annual retail prices for 1928 in state and co-operative trade in the city of Moscow, given by Janet Chapman.²

Column 3: Average annual rural and urban retail prices in consumer co-operatives in 1928, compiled by Tsentsosoyuz.³

Column 4: Average annual retail prices for rural and urban retail trade in 1928, compiled by Tsentsosoyuz, and presented by Malafeev.⁴ It is assumed that these prices refer to those charged in consumer co-operatives, although they could refer to socialised trade, since Malafeev says calculations of these prices were made on the basis of indicators from a diverse number of organisations for each year.

Column 5: These are the annual average rural and urban retail prices for 1928, calculated on the basis of the data in columns 1-4.

Appendix Table A1

Retail prices of goods in (a) Rural and (b) Urban Socialised Trade, USSR and Moscow (rubles)

Type of good		1		2		3		4		5	
		(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
1	Rye flour (95%)	kilo	0.11	0.10	0.11	0.11	0.10	0.11	0.10	0.11	0.10
2	Wholewheat flour (96%)	"	0.17	0.14	0.18	.	.	.	.	0.17	0.14
3	Rye bread (95%)	"	.	0.09	0.08	.	0.09	.	0.09	0.10	0.09
4	Wheat bread (80%)	"	.	0.18	0.24	.	0.18	.	.	0.21	0.18
5	Ground millet 1st sort	"	0.20	0.17	0.17	.	0.18	0.20	0.17	0.20	0.17
6	Buckwheat groats	"	0.21	0.19	0.20	.	0.20	0.27	0.19	0.21	0.19
7	Rice, 1-2 sort	"	.	0.47	0.51	.	.	.	.	0.57	0.51
8	Melted butter	"	1.92	2.20	2.26	.	2.26	.	.	1.98	2.26
9	Sunflower oil	litre	0.50	0.47	0.48	0.55	0.48	0.64	0.47	0.55	0.47
10	Sugar, granulated	kilo	0.65	0.62	0.62	0.65	0.62	0.68	0.62	0.65	0.62
11	Sugar, lump	"	0.73	0.70	0.70	.	.	.	.	0.73	0.70
12	Herring, ordinary	"	0.58	0.54	0.55	.	.	.	.	0.58	0.54
13	Pike-perch	"	.	.	0.49	.	.	.	.	0.53	0.49
14	Salt	"	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.04
15	Tea	"	6.56	6.30	6.30	.	.	.	.	6.56	6.30
16	Vodka	$\frac{1}{2}$ litre	1.06	1.07	0.88	.	.	.	.	1.06	1.07
17	Cigarettes	25	0.14	0.14	0.14	.	.	.	.	0.14	0.14
18	Smoking makhorka	50 gms	0.07	0.06	0.07	0.06	0.06	.	.	0.07	0.06
19	Matches	10 boxes	0.15	0.15	0.15	0.15	0.15	.	.	0.15	0.15
20	Household soap	kilo	0.51	0.46	0.36	0.59	0.54	0.51	0.47	0.51	0.47
21	Paraffin	litre	0.10	0.10	0.10	0.11	0.10	0.14	0.09	0.12	0.10
22	Thread	bobbin	0.13	0.12	0.13	0.14	0.13	0.11	0.13	0.14	0.13
23	Calico	metre	0.41	0.39	0.38	0.34	0.32	0.52	0.38	0.41	0.39
24	Coarse calico No 40	"	0.38	0.37	.	.	.	.	.	0.38	0.37
25	Moleskin	"	0.70	0.67	0.65	.	.	0.81	0.76	0.70	0.67
26	Woollen cloth	"	4.22	4.03	3.89	.	.	.	.	4.22	4.03
27	Cotton Socks, men's	pair	.	.	0.51	.	.	.	.	0.53	0.51
28	Galoshes, men's	"	3.61	3.59	3.55	.	.	.	.	3.60	3.60
29	Boots, men's, black	"	.	9.79	8.90	.	.	.	.	9.41	8.90
30	Boots ladies'	"	.	.	11.50	.	.	.	.	12.16	11.50
31	Ladies' oxfords	"	.	.	9.15	.	.	.	.	9.67	9.15
32	Children's oxfords	"	.	.	4.60	.	.	.	.	4.86	4.60

Note: A dot indicates that a price quote was not available.

Sources to table on 1928 prices

1 Rye flour (95%)

Column 1: This is the average consumer co-operative price of coarse milled rye flour (muka rzhanaya oboinaya) for the whole of the USSR in the first half of 1928. It is a 95 per cent extraction-rate flour, according to Chapman.⁵

Column 2: The average 1928 price in state and co-operative trade in the city of Moscow for the same type of flour as above.⁶ This is an estimated price based on quotations for the first half of the year. It is assumed by Chapman that the price of R 0.11/kilo established in April was unchanged for the remainder of the year.

Column 3: The average 1928 price in consumer co-operatives for rye flour (muka rzhanaya). No further description of this good is given, but it is assumed that this is the price of the cheapest and most common type of flour, ie the same as that above.

Column 4: The average 1928 price of rye flour (muka rzhanaya) in retail trade. No further description of the good is given, but it is assumed, as in column 3, that this is the price of the cheapest and most common type of flour.

Column 5: All of the sources agree that the average rural consumer co-operative retail price of rye flour was R 0.11/kilo either throughout 1928 or in the first half of that year. It is assumed that this was the average retail price in that year, that this was a 95 per cent extraction-rate flour, and that the average urban price in consumer co-operatives was R 0.10/kilo.

2 Wholewheat flour (96%)

Column 1: The average price of red label wheat flour, 1st sort of three sorts (muka pshenichn. 1 krasn., 3-s. pomol.), in the first half of 1928 was R 0.21/kilo in rural consumer co-operatives and R 0.18/kilo in urban consumer co-operatives. Chapman indicates that the price of this flour in Moscow consumer co-operatives in the same period was R 0.22/kilo, and that for 96 per cent extraction flour - R 0.18/kilo.⁷ Taking the same differential between the two types of flour as that given by Chapman it is assumed that the approximate price of 96 per cent extraction wheat flour in urban consumer co-operatives would have been R 0.14/kilo, and that for the same flour in rural consumer co-operatives - R 0.03/kilo higher at R 0.17/kilo.

Column 2: The average 1928 price for wheat flour, simple grind (pshenichnaya muka prostogo pomola) in towns of Moscow Oblast (state and co-operative trade).⁸ Chapman assumes that the price prevailing in co-operative stores on 1/3/28 applied to both state and co-operative trade and for the rest of the year. Chapman says that this is a 96 per cent extraction-rate flour.

Column 5: It is assumed that the column 1 prices applied. It is accepted that the prices presented here give only a rough approximation.

3 Rye bread (95%)

Column 1: This source only lists an urban retail price for co-operative stores and workers' co-ops throughout the USSR for sour rye bread (khleb rzhanoi kislyi) of R 0.09/kilo. This was the price prevailing in the first six months of 1928.

Column 2: The retail price of baked rye bread, sour (rzhanoi pechenyi khleb kisl.) in Moscow co-operative stores throughout 1928.⁹

Column 3: The average 1928 urban retail price of rye bread (khleb rzhanoi) in co-operative stores, collected by Tsentrosoyuz. It is assumed that this refers to the same type of bread as column 1.

Column 4: The average 1928 price of baked rye bread (khleb pechenyi rzhanoi) in urban retail trade.

Column 5: The average urban price is R 0.09/kilo. It is assumed that, as in the case of rye flour, the average rural retail price in socialised trade was R 0.01/kilo above that in the urban sector - ie R 0.10/kilo.

4 Wheat bread (80%)

Column 1: This is the average urban price of bread made of sifted wheat flour (khleb, pshenichnyi sitnyi), in consumer co-operatives. Chapman indicates that wheat bread made of simple sifted (prostoi sitnyi) flour was an 80 per cent extraction flour. It is assumed that the bread listed above was made from 80 per cent extraction flour.¹⁰

Column 2: This is the average price in retail trade in Moscow 1928 of the following varieties: baked wheat bread, white, sold by weight, 1st sort (pshen. pechen. khleb belyi vesovoi 1 sort); wheat bread (khleb pshenichnyi); wheat bread, standard (khleb pshenichnyi standartnyi).¹¹ According to Chapman it is probable that all of these designations refer to bread made of 80 per cent extraction flour.

Column 3: This is the average price in urban consumer co-operatives in 1928. No indication of the extraction rate of the flour is given.

Column 5: It is assumed that the average urban socialised trade price was R 0.18/kilo, and that the same urban/rural price differential as that for wheat flour was in operation - ie R 0.03/kilo - giving an average rural retail socialised trade price of R 0.21/kilo.

5 Ground millet, 1st sort

Column 1: The average retail price of ground millet (psheno tolchenoe) in co-operative stores in the first half of 1928. No further description of this good is given.

Column 2: The average monthly price of ground millet in state and co-operative stores in Moscow city throughout 1928.¹² Chapman says that this was probably a quotation for 1st sort ground millet.

Column 3: The average urban retail price of ground millet in 1928. This is the price charged in consumer co-operatives.

Column 4: The average 1928 price of ground millet charged in retail trade.

Column 5: From a comparison of the urban retail prices listed it appears that columns 1-4 are referring to the same good (and probably 1st sort). On the basis of this it is assumed that the retail prices listed in columns 1 and 4 give a fairly accurate figure for the rural and urban retail prices.

6 Buckwheat groats

Column 1: The average retail price of hulled buckwheat groats (krupa grechnevaya yadritsa) charged in consumer co-operatives in the first half of 1928.

Column 2: The average price of the same good as above, charged in state and co-operative stores in Moscow throughout 1928.¹³

Column 3: The average urban retail price for buckwheat groats (krupa grechnevaya) charged in consumer co-operatives throughout 1928

Column 4: The average 1928 retail price for buckwheat groats (krupa grechnevaya).

Column 5: Comparison of the urban prices listed suggests that the same or a broadly similar good is being compared. Columns 1 and 4 refer to rural prices; column 1 shows stability in the price of this good for the first six months of 1928 at R 0.21/kilo. Column 4 (which probably also lists rural retail co-operative prices) gives a price of R 0.27/kilo, an implausible figure, given that both use Tsentrosyuz data. It is assumed that the column 1 price is more representative and that, based on the trend for the first six months of 1928, the price for the whole year was R 0.21/kilo (columns 1 and 4 list the same urban retail price of R 0.19/kilo, which suggests that they are using the same data). The average urban price is based on data in columns 1, 3 and 4.

7 Rice

Column 1: The average urban and workers' co-operative price of rice (sort or origin not indicated) observed in the first half of 1928. Between 1/1/28 and 1/7/28 the price of this good rose from R 0.44/kilo to R 0.49/kilo, indicating fairly substantial inflation (which may have occurred in the second half of the year).

Column 2: The average price of Persian rice (ris persidskii) in Moscow state and co-operative shops in August and November 1928.¹⁴ Chapman notes that the grade of this rice is not given and therefore there is some margin for error. The narrowness of the monthly sample used to obtain the 1928 average price also points to the possibility of error especially given the substantial rise in prices in the first half of the year indicated above.

Column 5: Given the inflation observed at this time, the average Moscow price of R 0.51/ kilo has been taken as representative of the urban sector, and the village price has been assumed to be 12 per cent above that at R 0.57/kilo (this is the average percentage difference

between the urban and rural price of groats in socialised trade).

8 Melted butter

Column 1: The average retail price in consumer co-operatives of melted butter 1st sort (maslo toplen. [perepusknoe] 1 s) in the first half of 1928.

Column 2: The price of melted butter, 1st sort (maslo toplenoe, 1 sort) in state and co-operative trade in Moscow 1928.¹⁵

Column 3: The average urban co-operative retail price in 1928 of melted butter (maslo toplenoe). No further description of this good is given.

Column 5: Chapman gives the average urban socialised trade price as R 2.26/kilo.¹⁶ This is confirmed by column 3. Given that this is 3 per cent above the urban price in column 1, the average rural retail consumer co-operative price given in column 1 has been increased by 3 per cent, giving an approximate price of R 1.98/kilo.

9 Sunflower oil

Column 1: The average retail price of "sunflower oil" (maslo podsol-nechnoe) in consumer co-operatives in the first half of 1928.

Column 2: The estimated annual average retail price of sunflower oil in co-operative trade in the city of Moscow in 1928.¹⁷

Column 4: The annual average retail price of sunflower oil in 1928.

Column 5: Whereas most of the sources above agree that the urban retail price of this product was R 0.47 or R 0.48/litre, the rural retail price ranges from R 0.50 - R 0.64/litre. Therefore, the column 3 price has been chosen because it is close to the average of all three prices.

10 Sugar, granulated

Column 1: The average price in consumer co-operatives of granulated sugar (sakhar pesok) in the first half of 1928.

Column 2: The average 1928 retail price in Moscow state and co-operative stores of granulated sugar throughout 1928.¹⁸

Column 3: The average 1928 price of granulated sugar in consumer co-operatives.

Column 4: The average 1928 price of granulated sugar in retail co-operative trade.

Column 5: Chernomordik indicates that the price of this good in the first half of 1928 was constant.¹⁹ Taking the prices in columns 1 and 3 we obtain a price of R 0.65/kilo, which, it is assumed, is broadly representative of rural prices at this time. The average urban socialised trade price is assumed to have been R 0.62/kilo.

11 Sugar lump

Column 1: The average retail price of lump sugar (sakhar rafinad) in rural co-operative trade in the first half of 1928.

Column 2: The average retail price of the same type of sugar in the city of Moscow throughout 1928.²⁰

Column 5: Chernomordik indicates that the price of this good was constant in the first half of 1928.²¹ Furthermore, the All-Union Index of Retail Prices, calculated by the Conjuncture Institute, and based on data for 102 cities throughout the USSR,²² shows that there was no change in sugar prices between the first three quartiles of 1927/28 (October 1927 - June 1928), and the last six months of 1928.²³

12 Herring, ordinary

Column 1: The average retail price of ordinary herring (sel'd' ryadovaya) in consumer co-operatives in the first half of 1928.

Column 2: This is the annual average price in Moscow consumer co-operatives of ordinary herring (sel'di ryadovye); herring (sel'd'); Astrakhan herring (sel'di astrakhanskie); and ordinary Astrakhan herring

(sel'di ryadovye astrakhanskije).²⁴ Chapman indicates that the designation may have changed at certain times, but that the same good was referred to.

Column 5: The column 1 prices have been taken as representative of rural and urban prices in 1928, since the Conjuncture Institute index of retail prices shows that fish prices rose by 0.6 per cent in the second half of 1928 compared with the period October 1927-June 1928 (see section 11 for sources for the indices).

13 Pike-perch, fresh, frozen or salted

Column 2: This is the average price based on the April, July, August and September 1928 prices in co-operative shops in Moscow, and the January 1929 prices in Moscow state and co-operative shops. At different times the quotations refer to three types of pike-perch; fresh pike-perch (sudak svezhii); large pike-perch, salted (sudak soleniy merniy); and frozen pike-perch (sudak morozheniy).²⁵

Column 5: Since the Moscow and urban prices of herring were extremely close (see section 12 above) it has been assumed that the column 2 prices of pike-perch is representative of the average urban socialised trade price. The difference between the urban and rural prices of herring (the latter was 7.4 per cent greater than the former), has been applied to the urban price to give a rural price of R 0.53/kilo. It is accepted that there is some margin for error here.

14 Salt

Column 1: The retail price of ground Baskun or Bakhmut salt (sol' molotaya Baskunch. ili .Bakhmutsk.) in consumer co-operatives in the first half of 1928.

Column 2: The retail price of Perm coarse grain table salt (sol'stolovaya permskaya povarennaya) or coarse grain salt for cooking (sol' povarennaya dlya kukhn) in Moscow city state and co-operative trade throughout 1928.²⁶

Column 3: The retail price of "salt" (no further description) in co-operative trade in 1928.

Column 4: The average retail price of ground salt (sol' molotaya) in 1928.

Column 5: Since columns 1 and 4 refer to the retail price of ground salt the price of R 0.04/kilo has been chosen as representative for both sectors.

15 Tea

Column 1: The retail price of Tsentrosoyuz green label Chinese tea, No 1 (chai Tsentrosoyuza kit. No 1 [zel. etiket]) in consumer co-operatives in the first half of 1928.

Column 2: The average retail price of the same tea (no mention of green label however) in state and co-operative trade in Moscow in 1928.²⁷

Column 5: The urban price quoted in the reference for column 1 above is the same as that for column 2 (ie, R 6.30/kilo), indicating that the price of this good in the urban sector was constant throughout 1928. On the basis of this it is assumed that the column 1 rural retail price was also constant throughout 1928.

16 Vodka

Column 1: The average retail price of vodka [not including the bottle] (vino khleбноe [bez posudy]) in consumer co-operatives in the first half of 1928. This is the price per bottle; it is assumed that this is the standard half-litre bottle.

Column 2: The price of vodka (khleбноe vino) in Moscow stores during ten months of 1928.²⁸ It is assumed that this price does not include the cost of bottle and cork.

Column 5: The Moscow price looks extremely low, so the column 1 prices have been used.

17 Cigarettes

Column 1: The average retail price of cigarettes sort 2 A (papirosy 2 s. A) in consumer co-operatives in the first half of 1928.

Column 2: The average retail price of the same cigarettes as above (or their equivalents) in retail trade in the city of Moscow in 1928.²⁹

Column 5: It is clear from Chapman's study³⁰, and the comparison between the prices quoted above that the price of these cigarettes in urban and rural state and co-operative trade was unchanged at R 0.14/pack of 25 throughout 1928. The Conjuncture Institute index of retail prices also shows that the prices of tobacco goods were virtually unchanged between October 1927 and December 1928 (see section 11 for sources).

18 Smoking makhorka

Column 1: The average retail price of smoking makhorka (makhorka kuritel'naya) in consumer co-operatives in the first half of 1928.

Column 2: The average price of the same type of makhorka in Moscow city retail trade in the last five months of 1928.³¹

Column 3: The average retail price in urban and rural consumer co-operatives of "makhorka" (no further description) in 1928.

Column 5: It appears from a comparison of columns 1 and 2 that the average urban price of this good was constant throughout 1928 at R 0.06/50gms. On the basis of this it is also assumed that the rural retail price indicated in column 1 was also constant throughout the year at R 0.07/kilo. This has been chosen as the representative price for the rural sector, because the column 3 price does not indicate the type of makhorka chosen. The Conjuncture Institute index of retail prices also shows that prices of tobacco goods were virtually unchanged between October 1927 and December 1928 (see section 11 for sources).

19 Matches

Column 1: The average retail price in consumer co-operatives of matches (spichki) in the first half of 1928.

Column 2: The average retail price of matches (spichki) or Swedish matches (spichki svedskie) in state and co-operative stores in the city of Moscow on 1/1/28 - 1/7/28 and in January 1929.³² It is assumed that the price was in operation throughout 1928.

Column 3: The average retail price of matches (spichki) in consumer co-operatives in 1928.

Column 5: It appears that the price of matches was constant at R 0.15/packet of 10 boxes throughout 1928.

20 Household soap

Column 1: The average retail price of marbled soap 47 per cent fat content (mylo mramornoe 47%) in consumer co-operatives in the first half of 1928.

Column 2: The average retail price in 1928 of marbled soap (mylo mramornoe) in Moscow city retail outlets.³³ Chapman says that the fat content of this soap is unknown; judging from the urban price data presented above and below it appears that it may not be comparable with the others presented in this section.

Column 3: The average retail price of household soap (mylo khoz-yaistvennoe) in co-operative trade in 1928.

Column 4: The average retail price of household soap (mylo khozyai-stvennoe) in 1928.

Column 5: It appears that columns 1 and 4 may be referring to the same type of soap, whereas columns 2 and 3 may be quoting the prices of soaps of different fat content. Consequently, the column 1 and 4 prices have been used, since it is fairly certain that the 1928 price of 47 per cent fat content soap is being quoted.

21 Paraffin

Column 1: The average retail price of paraffin (kerosin) in consumer co-operatives in the first half of 1928.

Column 2: The average retail price of paraffin in Moscow city state and co-operative shops in 1928.³⁴

Column 3: The average retail price of paraffin (kerosin) in consumer co-operatives in 1928.

Column 4: The average retail price of paraffin (kerosin) in retail trade in 1928.

Column 5: This is the average of the retail prices of paraffin quoted in columns 1, 3 and 4.

22 Thread

Column 1: The retail price of 200 yards of Deer or Bear thread No 30-40 (nitki 200 yard No 30-40 olen', medved') in consumer co-operatives in the first half of 1928.

Column 2: The average price of thread, mat white, 200 yard spools, No 30-40 Bear brand (nitki matov. belye na katushkakh 200 yard No 30-40 "Medved") in state and co-operative trade in Moscow city in 1928.³⁵

Column 3: The average retail price of thread (nitki) in consumer co-operatives in 1928.

Column 4: The average retail price of thread [in bobbins] (nitki [v katushkakh]) in 1928.

Column 5: The column 4 price difference between urban and rural sectors is at odds both with the differences observed in other columns and with the urban/rural price difference for all goods observed by secondary sources.³⁶ Consequently, the column 4 price has been left out and an average of the rural retail prices in column 1 and 3 has been taken.

23 Calico

Column 1: The average retail price of calico, printed standard No 6, dye group No 5, 62cm wide (sitets st. 6, No 5 vytrav., sh 62sm) in consumer co-operatives in the first half of 1928.

Column 2: The average retail price of calico, standard No 6, group No 5 (sitets standart No 6, seriya No 5) in state and co-operative stores in Moscow city in 1928.³⁷ Chapman notes that another description of this type of cloth indicates that it was 62cm wide.

Column 3: The average retail price of calico (sitets) in consumer co-operatives in 1928. This source does not give any other description of the good apart from that above.

Column 4: The average retail price of calico (sitets) in 1928. There is no further description of this good.

Column 5: The average retail prices of calico given in column 1 have been taken as representative, because the urban price is roughly the

same as that in column 2, calico prices were stable in 1928,³⁸ and it is not certain what kind of cloth is quoted in column 4.

24 Coarse calico No 40

Column 1: The average retail price of coarse calico, bleached standard No 40, 62cm wide (byaz' otbeln. st. 40, sh. 62sm) in consumer co-operatives in the first half of 1928.

Column 5: The column 1 prices have been taken as representative, because cotton cloth prices at this time were stable, according to the Conjuncture Institute retail price index (see section 10 for sources).

25 Moleskin

Column 1: The average consumer co-operative price in the first half of 1928 of moleskin, standard No 220, 62cm wide (moleskin st, 220, sh. 62sm).

Column 2: This is the retail price of moleskin, plain coloured, standard No 220, 62cm (moleskin, gladko-krashen, standart 220, 62sm) in April, May and July 1928, and January 1929, in Moscow.³⁹

Column 4: The average retail price of moleskin (no further description) in 1928.

Column 5: The column 1 prices have been chosen in preference to those in column 4, because it is uncertain which type of cloth the latter refers to. Chapman indicates that moleskin prices were stable in 1928.⁴⁰

26 Woollen cloth

Column 1: The average retail price of broadcloth, cotton warp, Mossukno A, 133cm wide (sukno, bum. osn., Mossukno A, sh. 133sm) in consumer co-operatives in the first half of 1928.

Column 2: The estimated retail price of fine woollen fabrics, part wool, cotton warp, broadcloth A, 133cm (tonkosukonnye izdeliya, polusherstyanye, na bumazhnoi osnove: sukno A, 133sm) in Moscow city state and co-operative trade in 1928.⁴¹

Column 5: The column 1 prices have been taken as representative. It is assumed that woollen cloth prices were stable in 1928. Chapman indicates that the price of pure wool worsted was stable in 1928.⁴² It is likely that this also applied to other woollen cloths.

27 Cotton socks, mens'

Column 2: This is the Moscow price of socks, cotton, machine-made (noski bum. mash.) in April, May and July 1928 and January 1929.⁴³ It is assumed that this price held throughout 1928.

Column 5: The Moscow price has been taken as representative of the average price for the urban sector. The village price has been calculated by taking 104.1 per cent of the urban price (the average mark-up on calico, coarse calico and moleskin was 4.1 per cent and it is assumed that this also applied to cotton garments). It is accepted that there is some margin for error here.

28 Galoshes, men's

Column 1: The average retail price of men's galoshes, red brand (galoshi muzh., krasnoe kleimo) in consumer co-operatives in the first half of 1928.

Column 2: The average retail price of men's galoshes, No 10 (galoshi muzhskie, no.10) in Moscow city in April-December 1928.⁴⁴ Chapman assumes that this price was in operation throughout 1928 and notes that the price for men's galoshes, article No 110, was R 3.60/pair.

Column 5: Chapman indicates that the price of galoshes was the same throughout the USSR.⁴⁵ Thus, it has been assumed that the urban and rural socialised retail price was R 3.60/pair.

29 Boots, men's, black

Column 1: The average retail price of men's boots, machine-made, chrome, split vamp, article 25 (botinki muzh., mekh., khrom., otr.s., art 25) in urban and worker's consumer co-operatives in the first half of 1928.

Column 2: The average retail price of chrome leather boots, men's (botinki khromovye muzhskie) in Moscow city state and co-operative trade in 1928.⁴⁶ Chapman says that this type of boot is probably closely similar to: boots, soles screwed, sewn with concealed seam,

or pegged; chrome calf, split vamp, laced, linen lining (botinki vintovye, proshivnye zakrytaya vyrezka i derev. shpil'kov: khromovogo opoika otreznaya soyuzka, na shnurkakh, polotnaya podkladka), which were listed by the Moskozhd trust as having a retail price of R 8.90/pair.

Column 5: The Moscow price given in column 2 has been taken as representative of urban prices. The rural price is calculated on the basis of the urban price plus 5.7 per cent (the average difference between urban and rural prices in 1929, and regarded as "normal" by Barsov.⁴⁷) It is believed that this will give a rough approximation of the urban and rural prices, but it is accepted that there is some margin for error here. The column 1 price has not been used, because it is uncertain which type of boot is being referred to.

30 Boots, ladies'

Column 2: The average retail price of ladies' shoes; welted boots with leather or polished wood heels; chrome calf, split vamp, laced, linen lining (obuv' damskaya; botinki rantovye s kozhanyimi ili derevyannymi polirovannymi kablukami: khromovogo opoika, otreznaya soyuzka, na shnurkakh, polotnyanaya podkladka), which Chapman assumes to be in operation in Moscow city state and co-operative trade in 1928.⁴⁸

Column 5: The column 2 price has been taken as representative of the average urban price. The rural price is the urban price plus 5.7 per cent; see section 29 for explanation.

31 Ladies' Oxfords

Column 2: The retail price of ladies' oxfords, welted with leather or polished wood heels: chrome calf, split vamp, laced, leather lining (p/botinki damskie rantovye s kozhan. ili derevyannymi polirovannymi kablukami: khromovogo opoika, otreznaya soyuzka, na shnurkakh, s kozhanoi podkladkoi), which Chapman assumes to be in operation in Moscow city state and co-operative trade in 1928.⁴⁹ Chapman assumes that these shoes must be black, since the cost of coloured variants was considerably higher.

Column 5: As in the case of section 29 the Moscow price has been taken as representative of the urban price, and the rural price has been calculated by adding 5.7 per cent to the urban price.

32 Children's oxfords

Column 2: The retail price of children's shoes, sizes 27 to 30; oxfords of chrome leather calf or sheep, split vamp, laced, linen lining, screwed soles (detskaya obuv' razmery ot No 27 po No 30; polubotinki khromovogo opoika ili shevretovye, otreznaya soyuzka, na shnurkakh, polotnyanaya podkladka, vintovye), which Chapman assumes to be in operation in Moscow city state and co-operative trade in 1928.⁵⁰ Chapman assumes that these shoes must be black, since coloured varieties are listed at a higher price.

Column 5: As in the case of section 29 the Moscow price has been taken as representative of the urban price at this time. The rural price is the urban price plus 5.7 per cent.

FOOTNOTES

- 1 ITS pp.55, 108-111.
- 2 CHA, see sections for page references.
- 3 TGR pp.138-39.
- 4 MAL p.165.
- 5 CHA p.198.
- 6 CHA pp.190, 198.
- 7 CHA pp.99-100.
- 8 CHA p.190 ,199.
- 9 CHA pp.190, 198-99.
- 10 CHA p.201.
- 11 CHA pp.190, 201-202.
- 12 CHA pp.190, 204-205.
- 13 CHA pp.190, 204.
- 14 CHA pp.190, 205.
- 15 CHA pp.191,222.
- 16 CHA p.89.
- 17 Based on CHA pp.191, 223-24.
- 18 CHA pp.191, 218-19.
- 19 ITS pp.110-111.
- 20 CHA pp 191 - 218.
- 21 ITS pp.110-111.
- 22 MAL p.381.
- 23 Calculation based on indices from the following sources: SO No 5, 1928, p.157; SO No 7 1928, p.149; SO No 9, 1928, p.151; Byulleten' Kon'yunkturnogo Instituta No 5-6, 1928, p.16; No 7 1928, p.15; and No 1, 1929, p.149 . On the basis of this it is assumed that the price of R 0.73/kilo listed in column 1 applied throughout 1928 and was broadly representative of the village price at this time. Comparison between the column 1 and 2 urban prices indicates that they are identical. Thus the urban price is taken as R 0.70/kilo.
- 24 Quoted by CHA p.216.
- 25 CHA pp.190, 215.
- 26 CHA pp 192 - 240-41.
- 27 CHA pp.192, 241.
- 28 CHA pp.192, 242-43.
- 29 CHA pp.195, 299-300.
- 30 CHA pp.299-300.
- 31 CHA pp.195, 302.
- 32 CHA pp.195, 298-99.

- 33. CHA pp.194, 275-76.
 - 34. CHA pp.195, 298.
 - 35. CHA pp.193, 273.
 - 36. Barsov 1969, op.cit., p.115, says that in 1929 rural prices were 5.7 per cent higher than those in the urban sector, and that this excess was quite in order given the differences in transport expenditure etc.
 - 37. CHA pp.192, 244-45.
 - 38. CHA p.244-45.
 - 39. CHA pp.192, 247.
 - 40. CHA p.247.
 - 41. CHA pp.192, 247.
 - 42. CHA p.249.
 - 43. CHA pp.193, 260.
 - 44. CHA pp.193, 271-72.
 - 45. CHA p.89.
 - 46. CHA p.193, 263-64.
 - 47. Barsov 1969, op.cit., p.115.
 - 48. CHA pp.193, 264-65.
 - 49. CHA pp.193, 266.
 - 50. CHA pp.193, 266-67.
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APPENDIX B

Retail Prices in Socialised Trade, 1934-37

This Appendix presents the data collected on prices prevailing in rural retail socialised trade and prices paid by the peasants in urban retail socialised trade.

Appendix Table B1 presents the prices of manufactured goods and processed agricultural products calculated in this appendix (the annual average prices for 1934-37 are calculated in Chapter 3). Wherever it is applicable, the prices listed in the table below include an extra charge for cartage. Those applying within a radius of 7-30km of a railway station or wharf have been chosen for the following reasons: the most detailed data is available on the charges listed for this radius (cartage costs up to 7km of a railway station or wharf were already included in the delivery price ¹) and the majority of village retail outlets were situated up to 30km of a railway line or waterway, as the following table shows:

Distance of Rural Consumer Co-operatives from a Railway Line or Wharf (1935 trade census data)					
	0-5km	5-10km	10-30km	over 30km	not given
% of village outlets	18.3	14.7	35.8	29.9	1.3

Source: Sel'po (materialy torgovoi perepisi sel'po 1935g), Moscow 1936, p13

The above data was based on the 1935 census of village trading outlets. It covered 54,400 outlets in the following areas: Karelian ASSR, Leningrad Oblast, Western Oblast, Moscow Oblast, Ivanovo Oblast, Kirov Krai, Bashkir ASSR, Sverdlov Oblast, Voronezh Oblast, Saratov Krai, Stalingrad Krai, Azov-Black Sea Krai, North Caucasus Krai, Crimean ASSR, Kirgiz ASSR, West Siberian Krai, Omsk Oblast, Belorussian SSR, Uzbek SSR, Turkmen SSR, Tadzhik SSR.

It is believed that the charges for the 7-30km radius will give a reasonable approximation of the extra charges for cartage levied at this time. Any inaccuracies in the 1934-37 prices resulting from this will be quite small, since the total transport expenditure of rural consumer co-operatives was around 2 per cent of total turnover in the first half of the 1930s (1.9% in 1933, 2.37% in 1934 and 2.29% in 1935).²

See Appendix C for an examination of the comparability of the goods listed below.

Appendix Table B1

Prices paid by the Peasantry in Rural and Urban Socialised Trade, USSR, 1934* (rubles)

Good		Label	Rural normal fund	Commercial		Unitary	
				Rural	Urban	Rural	Urban
1 Rye flour (95%)	kilo	-	0.53	-	-	-	-
2 Wholewheat flour (96%)	"	-	0.59	-	-	-	-
3 Rye bread (95%)	"	-	0.42	-	1.50	-	-
4 Wheat bread '80%)	"	-	0.97	-	3.00	-	-
5 Ground millet 1st sort	"	-	0.31	-	4.63	-	-
6 Buckwheat groats	"	-	0.36	-	6.25	-	-
7 Rice, 1-2 sort	"	-	1.13	-	9.34	-	-
8 Melted butter	"	-	6.65	-	na	-	-
9 Sunflower oil	litre	-	2.73	-	21.74	-	-
10 Sugar, granulated	kilo	-	3.55	-	12.60	-	-
11 Sugar, lump	"	-	4.05	-	14.30	-	-
12 Herring, ordinary	"	-	na	-	na	-	-
13 Pike-perch	"	-	na	-	na	-	-
14 Salt	"	-	0.10/0.10**	-	-	-	-
15 Tea	"	-	20.60/20.60	-	80.00	-	-
16 Vodka	$\frac{1}{2}$ litre	5.50	-	-	-	-	-
17 Cigarettes	25	0.35	-	-	-	-	-
18 Smoking makhorka	50 gms	-	0.25	-	1.00	-	-
19 Matches	10 boxes	0.30	-	-	-	-	-
20 Household soap	kilo	-	2.50	-	3.00	-	-
21 Paraffin	litre	-	-	-	-	0.72	0.49
22 Thread	bobbin	-	-	0.43	0.43	-	-
23 Calico	metre	-	-	1.94	1.94	-	-
24 Coarse calico No 40	"	-	-	2.07	2.07	-	-
25 Moleskin	"	-	-	2.79	2.79	-	-
26 Woollen cloth	"	-	-	21.00	21.00	-	-
27 Cotton Socks, men's	pair	-	-	2.28	2.28	-	-
28 Galoshes, men's	"	-	-	15.00	15.00	-	-
29 Boots, men's black	"	-	-	27.67	27.67	-	-
30 Boots ladies'	"	-	-	30.00	30.00	-	-
31 Ladies' oxfords	"	-	-	27.75	27.75	-	-
32 Children's oxfords	"	-	-	12.00	12.00	-	-

Source: See relevant section of Appendix.

A dash indicates that the corresponding price was not charged for the good.

na means that the data was not available.

* These are the average prices observed at various times in 1934. For the annual average prices see Appendix Table B5.

** It is assumed that normal fund supplies of salt were open to the peasants in both urban and rural sectors.

Appendix Table B2

Prices Paid by the Peasantry in Rural and Urban Socialised Trade, USSR, 1935* (rubles)

Good	Label		Rural normal fund	Commercial		Unitary	
				Rural	Urban	Rural	Urban
1 Rye flour (95%)	kilo	-	-	-	-	2.07	2.07
2 Wholewheat flour (96%)	"	-	-	-	-	2.26	2.26
3 Rye bread (95%)	"	-	-	-	-	0.93	0.93
4 Wheat bread (80%)	"	-	-	-	-	1.86	1.86
5 Ground millet 1st sort	"	-	-	-	-	2.37	2.37
6 Buckwheat groats	"	-	-	-	-	4.52	4.52
7 Rice, 1-2 sort	"	-	-	-	-	7.62	7.62
8 Melted butter	"	-	6.65	-	na	19.53	19.53
9 Sunflower oil	litre	-	2.73	-	21.74	12.70	12.70
10 Sugar, granulated	kilo	-	3.55	-	6.50	4.61	4.61
11 Sugar, lump	"	-	4.05	-	7.50	4.90	4.90
12 Herring, ordinary	"	-	na	-	na	5.87	5.90
13 Pike-perch	"	-	na	-	na	3.71	3.73
14 Salt	"	-	0.10/0.10**	-	-	0.18	0.13
15 Tea	"	20.60/20.60	-	-	80.00	80.00	80.00
16 Vodka	$\frac{1}{2}$ litre	5.50	-	-	-	5.50	5.50
17 Cigarettes	25	0.35	-	-	-	-	-
18 Smoking makhorka	50 gms	-	0.25	-	1.00	0.50	0.50
19 Matches	10 boxes	0.30	-	-	-	-	-
20 Household soap	kilo	-	2.50	-	3.00	2.76	2.83
21 Paraffin	litre	-	-	-	-	0.72	0.49
22 Thread	bobbin	-	-	0.43	0.43	0.41	0.41
23 Calico	metre	-	-	2.14	2.14	-	-
24 Coarse calico No 40	"	-	-	2.35	2.35	-	-
25 Moleskin	"	-	-	3.23	3.23	-	-
26 Woollen cloth	"	-	-	21.00	21.00	42.89	42.40
27 Cotton Socks, men's	pair	-	-	2.28	2.28	1.93	1.88
28 Galoshes, men's	"	-	-	15.00	15.00	15.00	15.00
29 Boots, men's, black	"	-	-	na	na	-	-
30 Boots ladies'	"	-	-	na	na	-	-
31 Ladies' oxfords	"	-	-	na	na	-	-
32 Children's oxfords	"	-	-	na	na	-	-

Sources: See relevant section of Appendix.

A dash indicates that the corresponding price was not charged for the good.

na means that the data was not available.

* These are the average prices observed at various times in 1935. For the annual average prices see Appendix Table B5.

** It is assumed that normal fund supplies of salt were open to the peasants in both urban and rural sectors.

Appendix Table B3

Prices Paid by the Peasantry in Rural and Urban Socialised Trade, USSR, 1936* (rubles)

Type of Good	Label		Commercial		Unitary	
			Rural	Urban	Rural	Urban
1 Rye flour (95%)	kilo	-	-	-	1.48	1.48
2 Wholewheat flour (96%)	"	-	-	-	1.74	1.74
3 Rye bread (95%)	"	-	-	-	0.82	0.82
4 Wheat bread (80%)	"	-	-	-	1.62	1.62
5 Ground millet 1st sort	"	-	-	-	1.98	1.98
6 Buckwheat groats	"	-	-	-	4.19	4.19
7 Rice, 1-2 sort	"	-	-	-	5.87	5.87
8 Melted butter	"	-	-	-	19.53	19.53
9 Sunflower oil	litre	-	-	-	12.70	12.70
10 Sugar, granulated	kilo	-	-	-	4.03	4.03
11 Sugar, lump	"	-	-	-	4.23	4.23
12 Herring, ordinary	"	-	-	-	5.87	5.90
13 Pike-perch	"	-	-	-	3.71	3.73
14 Salt	"	-	-	-	0.18	0.13
15 Tea	"	-	-	-	80.00	80.00
16 Vodka	$\frac{1}{2}$ litre	-	-	-	5.50	5.50
17 Cigarettes	25	0.35	-	-	-	-
18 Smoking makhorka	50 gms	-	-	-	0.42	0.42
19 Matches	10 boxes	0.25	-	-	-	-
20 Household soap	kilo	-	-	-	2.45	2.31
21 Paraffin	litre	-	-	-	0.72	0.49
22 Thread	bobbin	-	-	-	0.41	0.41
23 Calico	metre	-	2.35	2.35	2.31	2.32
24 Coarse calico No 40	"	-	2.60	2.60	2.57	2.56
25 Moleskin	"	-	3.50	3.50	3.75	3.75
26 Woollen cloth	"	-	-	-	42.89	42.58
27 Cotton Socks, men's	pair	-	-	-	1.93	1.88
28 Galoshes, men's	"	-	-	-	15.00	15.00
29 Boots, men's, black	"	-	na	na	48.65	50.84
30 Boots ladies'	"	-	na	na	44.63	45.39
31 Ladies' oxfords	"	-	na	na	42.41	42.71
32 Children's oxfords	"	-	na	na	17.46	17.46

Sources: See relevant section of Appendix.

A dash indicates that the corresponding price was not charged for the good.
na means that the data was not available.

*These are the average prices observed at various times in 1936. For the annual average prices see Appendix Table B5.

Appendix Table B4

Prices Paid by the Peasantry in Rural and Urban Socialised Trade, USSR, 1937* (rubles)

Good	Label		Unitary	
			Rural	Urban
1 Rye flour (95%)	kilo	-	1.46	1.46
2 Wholewheat flour (96%)	"	-	1.72	1.72
3 Rye bread (95%)	"	-	0.82	0.82
4 Wheat bread (80%)	"	-	1.60	1.60
5 Ground millet 1st sort	"	-	1.96	1.96
6 Buckwheat groats	"	-	4.18	4.18
7 Rice, 1-2 sort	"	-	5.87	5.87
8 Melted butter	"	-	19.53	19.53
9 Sunflower oil	litre	-	12.70	12.70
10 Sugar, granulated	kilo	-	4.03	4.03
11 Sugar, lump	"	-	4.23	4.23
12 Herring, ordinary	"	-	5.87	5.90
13 Pike-perch	"	-	3.71	3.73
14 Salt	"	-	0.18	0.13
15 Tea	"	-	80.00	80.00
16 Vodka	$\frac{1}{2}$ litre	-	5.50	5.50
17 Cigarettes	25	0.35	-	-
18 Smoking makhorka	50 gms	-	0.35	0.35
19 Matches	10 boxes	0.23	-	-
20 Household soap	kilo	-	2.35	2.27
21 Paraffin	litre	-	0.72	0.48
22 Thread	bobbin	-	0.41	0.41
23 Calico	metre	-	2.15	2.25
24 Coarse calico No 40	"	-	2.49	2.54
25 Moleskin	"	-	3.75	3.83
26 Woollen cloth	"	-	42.89	42.82
27 Cotton Socks, men's	pair	-	1.85	1.81
28 Galoshes, men's	"	-	14.30	15.05
29 Boots, men's, black	"	-	47.35	52.38
30 Boots ladies'	"	-	43.33	46.52
31 Ladies' oxfords	"	-	41.18	42.86
32 Children's oxfords	"	-	16.96	17.37

Sources: See relevant section of Appendix.

A dash indicates that the corresponding price was not charged for the good.

* These are the average prices observed at various times in 1936. For the annual average prices see Appendix Table B5.

Appendix Table B5

Average Prices Paid by the Peasantry in (a) Rural and (b) Urban Retail
Socialised Trade, 1928, 1934-37 (rubles)

			1928		1934		1935		1936		1937	
			a	b	a	b	a	b	a	b	a	b
1	Rye flour (95%)	kilo	0.11	0.10	0.53	-	2.07	2.07	1.48	1.48	1.46	1.46
2	Wholewheat flour (96%)	"	0.17	0.14	0.59	-	2.26	2.26	1.74	1.74	1.72	1.72
3	Rye bread (95%)	"	0.10	0.09	0.42	1.50	0.93	0.93	0.82	0.82	0.82	0.82
4	Wheat bread (80%)	"	0.21	0.18	0.97	3.00	1.86	1.86	1.62	1.62	1.60	1.60
5	Ground millet 1st sort	"	0.20	0.17	0.31	4.63	2.37	2.37	1.98	1.98	1.97	1.97
6	Buckwheat groats	"	0.21	0.19	0.36	6.25	4.52	4.52	4.19	4.19	4.18	4.18
7	Rice, 1-2 sort	"	0.57	0.51	1.13	9.34	7.62	7.62	5.87	5.87	5.87	5.87
8	Melted butter	"	1.98	2.26	na	na	na	na	19.53	19.53	19.53	19.53
9	Sunflower oil	litre	0.55	0.47	2.73	21.74	5.22	18.44	12.70	12.70	12.70	12.70
10	Sugar, granulated	kilo	0.65	0.62	3.55	12.16	3.82	6.03	4.03	4.03	4.03	4.03
11	Sugar, lump	"	0.73	0.70	4.05	14.30	4.25	6.85	4.23	4.23	4.23	4.23
12	Herring, ordinary	"	0.58	0.54	na	na	na	na	5.87	5.90	5.87	5.90
13	Pike-perch	"	0.53	0.49	na	na	na	na	3.71	3.73	3.71	3.73
14	Salt	"	0.04	0.04	0.10	0.10	0.12	0.11	0.18	0.13	0.18	0.13
15	Tea	"	6.56	6.30	20.60	50.30	50.30	65.15	80.00	80.00	80.00	80.00
16	Vodka	$\frac{1}{2}$ litre	1.06	1.07	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
17	Cigarettes	25	0.14	0.14	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
18	Smoking makhorka	50 gms	0.07	0.06	0.25	1.00	0.42	0.67	0.42	0.42	0.35	0.35
19	Matches	10 boxes	0.15	0.15	0.30	0.30	0.30	0.30	0.25	0.25	0.23	0.23
20	Household soap	kilo	0.51	0.47	2.50	3.00	2.66	2.68	2.39	2.31	2.35	2.27
21	Paraffin	litre	0.12	0.10	0.72	0.49	0.72	0.49	0.72	0.49	0.72	0.48
22	Thread	bobbin	0.14	0.13	0.43	0.43	0.41	0.41	0.41	0.41	0.41	0.41
23	Calico	metre	0.41	0.39	1.94	1.94	2.35	2.35	2.31	2.32	2.15	2.25
24	Coarse calico No 40	"	0.38	0.37	2.07	2.07	2.35	2.35	2.58	2.56	2.49	2.54
25	Moleskin	"	0.70	0.67	2.29	2.29	3.23	3.23	3.69	3.69	3.75	3.83
26	Woollen cloth	"	4.22	4.03	21.00	21.00	31.95	31.70	42.89	42.58	42.89	42.82
27	Cotton Socks, men's	pair	0.53	0.51	2.28	2.28	2.16	2.15	1.93	1.88	1.85	1.81
28	Galoshes, men's	"	3.60	3.60	15.00	15.00	15.00	15.00	15.00	15.38	14.30	15.05
29	Boots, men's, black	"	9.41	8.90	27.67	27.67	na	na	48.65	50.84	47.35	52.38
30	Boots ladies'	"	12.16	11.50	30.00	30.00	na	na	44.63	45.39	43.33	46.52
31	Ladies' oxfords	"	9.67	9.15	27.75	27.75	na	na	42.41	42.71	41.18	42.86
32	Children's oxfords	"	4.86	4.60	12.00	12.00	na	na	17.46	17.46	16.96	17.37

A dash indicates that the good was not available to the peasants in the urban sector.

na - means that an average price was not available.

Sources: See sections on average annual prices in the Appendix.

Sources for price quotations 1934-37

1 Rye flour (95%)

Normal fund

1934: Muka rzhanaya oboinaya, 95% (rye flour coarse milled, 95 per cent extraction) was R 0.32/kilo in all areas of Central Black-Earth Oblast within a radius of 7.30km of a railway station or wharf from 20/8/33.³ The same price of R 0.32 for rye flour (95%) was in operation in all areas of Leningrad Oblast within a radius of 7-30km from a railway station or wharf on 20/9/33.⁴ The price of R 0.30/kilo within the 7km radius, was also introduced in the Bashkir ASSR on 14/8/33;⁵ and was in operation in Stalingrad Krai in February 1934,⁶ and Gorkii Krai in April 1934.⁷ The price of R 0.32/kilo was also charged within the 7-30km radius in Western Siberian Krai in late 1933.⁸ In Azov-Black Sea and North Caucasus Krai on 1/9/34 the price in town and village was R 0.66/kilo plus a R 0.02/kilo cartage charge (within a radius of 7-30km of a railway station or wharf).⁹ This price was introduced by Narkomsnab Order No 168, 169 31/5/34. As in the case of wheat flour these prices applied to retail sales of flour and for bread baking. The basic price of R 0.66/kilo was also in operation in Moscow City in June 1934.¹⁰ The same price plus a R 0.02/kilo cartage charge was in operation throughout Gorkii Krai in October 1934.¹¹ Assuming that, as in later periods, flour prices paralleled bread prices and changed once in 1934, then the price of R 0.32 was in operation up to 31/5/34, and R 0.68 from 1/6/34 to the end of the year.

Commercial fund

1934: No information on commercial prices of flour has been uncovered so far. It appears likely that this was because flour was not sold in commercial trade. This has been confirmed by eye-witness accounts related to the author. Thus it has been assumed that there was no commercial trade in flour in 1934.

Unitary price

1935: A unitary price, divided into eight regional belts, was established for all types of flour on 1/1/35.¹² The areas included in the belts were as follows:

Belt I - Tadzhik, Uzbek and Turkmen SSRs; Kara-Kalpak ASSR, South-kazakhstan Oblast of the Kazakh ASSR; the following Raions of the

Kirgiz ASSR: Alays, Aravan-burin, Bazar-kurgan, Dzhelal'abad, Ketmen'-tyube, Kyzyl-dzhar, Kyzyl-kiya, Lyaylyak, Naukat and Uzgen.

Belt II - Kiev, Khar'kov, Donets, Chernigov and Vinitsa Oblasts of Ukrainian SSR, Moldavian ASSR, North Caucasus, Azov-Black Sea, Stalingrad, Saratov and Middle Volga Krai; Tatar and Bashkir ASSRs; West-Siberian Krai minus Kargasok and Kolpashevo Raions of Narym Okrug (included in Belt VIII); Kazakh ASSR, excluding South-kazakhstan Oblast (included in Belt I); Kirgiz ASSR, excluding 10 raions in Belt I.

Belt III - Moscow and Ivanovo Oblasts; Gorkii Krai, Western, Kursk and Voronezh Oblasts; Dnepropetrovsk and Odessa Oblasts of Ukrainian SSR; Crimean ASSR; Chelyabinsk Oblast; ZSFSR; Belorussian SSR; Ob-irtysh Oblast, excluding Pre-Ural, Yamal, Nadym Purov and Nizhnetazov Raions of the Yamal National Okrug (included in Belt VII).

Belt IV - Leningrad Oblast, excluding Murmansk Okrug (included in Belt V); Sverdlovsk Oblast; East-Siberian Krai, excluding Buryat-Mongolian ASSR (included in Belt VI), and Chitin Oblast, Taimyr (Dolgano-nenets), Evenki and Vitimo-olekminsk National Okrugs (included in Belt VII).

Belt V - Karelian ASSR; Murmansk Okrug of Leningrad Oblast; Northern Krai, excluding areas included in Belt VII.

Belt VI - Buryat-Mongolian ASSR.

Belt VII - Far-Eastern Krai, excluding areas included in Belt VIII; Yakut ASSR; the following areas of East-Siberian Krai: Chitin Oblast and Taimyr (Dolgano-nenets), Evenki and Vitimo-olekminsk National Okrugs; the following areas in Northern Krai: Nenets National Okrug, Mezen' Raion, Leshukov Raion, and Izhem, Troitso-Pechorsk, Udorsk, Usinsk and Ust'tsilemsk Raions of Komi Autonomous Oblast; islands of the northern Arctic Ocean and the White Sea; Kargasov and Kolpashev Raions of Narym Okrug in West-Siberian Krai; Pre-Ural, Yamal, Nadym, Purov and Nizhnetazov Raions of the Yamal National Okrug of Ob-Irtysh Oblast.

Belt VIII - The following areas in Far-Eastern Krai: Kamchatka, Sakhalin and Nizhne-Amur Oblasts, Chukotskoe and Koryakov National Okrugs, Buren and Selemdzhin Raions of Amur Oblast, Dzhultulak and Zeisko-uchursk Raions of Zeisk Oblast, Bikin and Kur-urmii Raions of Khabarovsk Oblast and Sovetskii Raion in Primorskoe Oblast.

The following belt prices have been observed so far for this type of flour (rubles/kilo):

		I	II	III	IV	V	VI	VII	VIII
1	1/1/35 - 20/6/35	-	-	2.50	-	-	-	-	-
2	21/6/35 - 30/9/35	1.35	1.80	2.10	2.30	2.50	2.60	2.80	3.10
3	1/10/35 onwards	0.90	1.30	1.60	1.80	2.00	2.10	2.30	2.60

The table was compiled on the following basis: The price of 95 per cent extraction flour in Western Oblast (Belt III) on 10/1/35 was R 2.50/kilo, and there was no extra transport charge.¹³ The same price was also in operation in the oblast in March 1935,¹⁴ and in the Georgian SSR (Belt III) in May/June¹⁵, but in the latter there was an extra cartage charge of R 0.05/kilo within a 5-20km radius of a railway station or wharf (probably because of the difficult geographical conditions in the republic). From 21/6/35 the price in Western Oblast was reduced to R 2.10/kilo.¹⁶ Bolotin confirms that the price of rye flour fell by 15.8 per cent on average on 21/6/35.¹⁷ On 1/10/35 the price was reduced again and the source which listed all of the new prices given in line 3¹⁸, also gave all of the prices prevailing before the change (line 2). It is assumed that the price remained unchanged from October 1935 onwards (see section on 1936/37 below).

Observation of the prices given in lines 2 and 3 of the table above (and also price changes for other types of flour, bread and groats - see below), shows that price reductions in this period tended to have a constant character between belts. Thus, for example, in October 1935 prices were reduced for this type of flour by R 0.50/kilo in Belts II-VIII and R 0.45/kilo in Belt I. To give a rough approximation of the prices introduced in January 1935 we shall assume that the R 0.40/kilo price fall shown for Belt III in June 1935 applied to Belts II-VIII, and that the price for Belt I was

reduced by R 0.35/kilo. This gives the following prices assumed to be in operation on 1/1/35 - 20/6/35:

Belts	I	II	III	IV	V	VI	VII	VIII
	1.70	2.20	2.50	2.70	2.90	3.00	3.20	3.50

It must be stressed that these prices, apart from that of Belt III, are estimates, but it is highly likely that they are extremely close if not identical with those prevailing at the time.

Using the prices presented above we can now give the annual prices for the belts in 1935:

Belts	I	II	III	IV	V	VI	VII	VIII
	1.41	1.88	2.18	2.38	2.58	2.68	2.88	3.18

These prices do not include extra cartage charges, which operated in some areas.¹⁹

1936-37: The prices in Belts I-VII remained unchanged in mid-1936, but Belt VIII was abolished.²⁰ It appears that the prices in Belts II, III, V and VII were unchanged up to 1938.²¹ On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged from 1/10/35 - 31/12/37.

The following changes were made to the composition of the belts:²²

Belt I - Unchanged

Belt II - Middle Volga Krai was replaced by Kuibyshev Krai and Orenburg Oblast. Omsk Oblast (minus Pre-Ural, Yamal, Nadym, Purov and Nizhnetazov Raions of Yamal National Okrug - in Belt VII), Dnepropetrovsk and Odessa Oblasts of the Ukrainian SSR, and Crimean ASSR were included.

Belt III - The following extra areas were included: Kalinin Oblast, Kirov Krai, Krasnoyarsk Krai (excluding Evenkii and Taimyr-Dolgano Nenets National Okrugs - in Belt VII), and Sakhalin and Kamchatka Oblasts, Crimean ASSR and Ob-Irtysh Oblast were not included.

Belt IV - This was unchanged except Alar, Bokhan and Ekhiresh-Bulagat Raions of Buryat-Mongolian ASSR remained in Belt IV, and the former Chitin and Bodaibin Raions from this ASSR were included in Belt VII.

Belt V - Unchanged

Belt VI - Unchanged, except for the raions in Buryat-Mongolian ASSR included in Belt IV.

Belt VII - Bodaibin Raion of East-Siberian Krai was added, and Far Eastern Krai, Vitimo-olekminsk National Okrug of East-Siberian Krai and Kargasov and Kolpashev Raions of Narym Okrug in West-Siberian Krai were excluded.

It is assumed that no extra cartage charges were levied in 1936/37.

Annual average price

1934: The normal fund price was R 0.32/kilo for the first five months, and R 0.68/kilo for the remaining seven, giving an average price of R 0.53/kilo. This includes an extra charge for cartage of R 0.02/kilo levied within the 7-30km radius. Since it appears that there was no commercial trade in flour, and it is known that rationed supplies were not made available to the peasantry through urban sector channels, it is assumed that this was the annual average price paid by the peasantry.

1935: The following was the percentage attached to each unitary price belt in order to obtain the average unitary price:

Belts	I	II	III	IV	V	VI	VII	VIII
	5.8%	43.5%	34.3%	9.1%	2.9%	1.3%	1.8%	1.3%

The breakdown was made using the rural retail turnover data presented in Appendix Table D2. Taking the annual belt prices for 1935 presented earlier, this gives an average annual urban and rural unitary USSR price for 1935 of R 2.07/kilo. No extra charges for cartage within the 7-30km radius have been included.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, the percentage weights given above are taken for the first six months of 1936, and the following are taken for the remaining six months and all of 1937:

Belts	I	II	III	IV	V	VI	VII
	5.8%	45.7%	34.7%	9.1%	2.9%	1.3%	0.5%

Taking the prices that applied from 1/10/35 onwards - see above - we get the following prices for the two periods of 1936: R 1.49/kilo, based on eight belts in the first half of 1936 ; R 1.46/kilo, based on seven belts in the second half of 1936 . This gives an

average urban and rural unitary USSR price for 1936 of R 1.48/kilo. The price of R 1.46/kilo that applied in the second half of 1936 also applied throughout 1937. No extra charges for cartage in the 7-30km radius have been included.

See Chapter 3 for calculation of the average price paid in the urban and rural sectors.

2 Wholewheat flour (96%)

Normal fund

1934: Muka pshenichnaya, 96% (wheat flour, 96% extraction). A price of R 0.37/kilo was in operation within a radius of 7-30km of a railway station or wharf throughout the Central Black Earth Oblast, from 20/8/33.²³ The same price of R 0.37 was in operation under the same conditions throughout Leningrad Oblast, on 20/9/33,²⁴ and in Western Siberian Krai in late 1933.²⁵ The price of R 0.35/kilo, within the 7km radius, was also introduced in the Bashkir ASSR on 14/8/33,²⁶ and it was also in operation in Stalingrad Krai in February 1934,²⁷ and Gorkii Krai in April 1934.²⁸ One source²⁹ lists a town and village price of R 0.72/kilo plus R 0.02 cartage charge (7-30km see above). This price was introduced by Narkomsnab Order No 168, 169 31/5/34, and was in operation throughout Azov - Black Sea and North Caucasus Krai on 1/9/34. The same source notes that these prices applied to retail sales of flour and for bread baking. The basic price of R 0.72/kilo was also in operation in Moscow city in June 1934,³⁰ and the same price and cartage charge were in operation throughout Gorkii Krai in October 1934.³¹ Assuming that flour prices changed once in 1934, then the price of R 0.37 was in operation up to 31/5/34, and R 0.74 from 1/6/34 to the end of the year.

Commercial fund

1934: As in the case of rye flour it is assumed that there was no commercial trade in flour during this period.

Unitary price

1935: The unitary price was introduced at the same time as that for rye flour, and the prices were changed at the same time. The eight regional belts listed for rye flour also applied to wheat.

The following are the prices observed so far:

		I	II	III	IV	V	VI	VII	VIII
1	1/1/35 - 20/6/35	-	-	2.60	-	-	-	-	-
2	21/6/35 - 30/9/35	1.40	2.05	2.25	2.55	2.75	2.85	3.15	3.45
3	1/10/35 onwards	1.00	1.60	1.80	2.10	2.30	2.40	2.70	3.00

The price of this type of flour in Western Oblast (Belt III) on 10/1/35 was R 2.60/kilo,³² and it was still in operation in the Oblast in March,³³ and in the Georgian SSR (Belt III) in May/June.³⁴ On 21/6/35 the price in Western Oblast was reduced to R 2.25.³⁵

Lines 2 and 3 of the table above show that the Belt III price was in operation up to the price reduction in October 1935.³⁶ It has been assumed that none of the other belt prices were changed between late June and September and that the prices introduced in October remained in operation for the rest of the year; see notes on 1936-37 for support for this assumption.

As in the case of rye flour, we can see that the price change (lines 2 and 3) was R 0.45/kilo for Belts II-VIII, and R 0.05/kilo less for Belt I. Assuming that this relationship held with the R 0.35/kilo price fall in June -ie, R 0.35/kilo fall for Belts II-VIII, and R 0.30/kilo for Belt I - we obtain the following rough estimate of the belt prices on 1/1/35 - 20/6/35:

I	II	III	IV	V	VI	VII	VIII
1.70	2.40	2.60	2.90	3.10	3.20	3.50	3.80

Taking these prices to be in operation for the first six months of 1935 and those for the last six months to be divided equally between the other two sets of prices listed overleaf, we obtain the following annual average belt prices for 1935:

I	II	III	IV	V	VI	VII	VIII
1.45	2.11	2.31	2.61	2.81	2.91	3.21	3.51

The prices do not include extra cartage charges, which operated in some areas; see notes on rye flour.

1936-37: The same changes in the composition of the regional belts listed for rye flour also applied to wheat flour; see section on rye flour.

The prices in Belts I-VII in mid-1936 were the same as those introduced in October 1935, except that Belt VIII had been abolished.³⁷ The prices in Belts II, III, V and VII were unchanged from this level up to 1938.³⁸ On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged between 1/10/35 and 31/12/37.

It is assumed that no extra cartage charges were levied in 1936-37.

Annual average price

1934: The normal fund price was R 0.37/kilo for the first five months and R 0.74/kilo for the remaining seven. This gives an average price of R 0.59/kilo. This includes an extra charge of R 0.02/kilo for cartage within the 7-30km radius. Since it appears that there was no commercial trade in flour, and it is known that rationed supplies were not made available to the peasantry through urban sector channels, it is assumed that this was the annual average price paid by the peasantry.

1935: Taking the average belt prices for 1935 (see above) and applying the percentage weights given in section 1 (rye flour, see above), we get an annual average urban and rural USSR unitary price paid by the peasantry, of R 2.26/kilo. No extra charges for cartage levied within the 7-30km radius have been included.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, taking the percentage weights given in section 1 for the first and second halves of 1936, and the belt prices for wholewheat flour that applied from 1/10/35 onwards, we get the following prices for the two halves of 1936: R 1.75/kilo for the first six months (eight belts), and R 1.72/kilo for the last six months (seven belts) giving an average urban and rural unitary USSR price paid by the peasantry of R 1.74/kilo for 1936. The price of R 1.72/kilo applied throughout 1937.

No extra charges for cartage levied within the 7-30km radius have been included.

See Chapter 3 for the average price paid in the urban and rural sectors.

3 Rye bread (95%)

Normal fund

1934: It appears that the price of sour rye bread (khleb rzhanoi kislyi) remained unchanged between August 1933 and the end of May 1934. This assumption is based on the following data: the Moscow price of rye bread increased from R 0.13/kilo approximately to R 0.25 in 1933, and a Moscow price handbook confirms that a price of R 0.25 was charged from mid-August 1933.³⁹ UFA-33b, VOR and LEN-33 all confirm that the same price was in operation from 20/8/33 in Leningrad Oblast, Central Black-Earth Oblast and Ufa city.⁴⁰ They also indicate that an extra charge for the deferment of cartage was added within the 7-30km radius.

The price of R 0.25/kilo was also in operation in January, February, and April 1934.⁴¹ From 1 June of that year the price of this bread was increased to R 0.50/kilo,⁴² and the price was still in operation in October and November of that year.⁴³ An extra charge for cartage of R 0.02/kilo was added in the 7-30km radius in Gorkii Krai and Azov-Black Sea and North Caucasus Krai. It is assumed that this was the only price rise in 1934.⁴⁴ It is also assumed that the extra charge for cartage was R 0.02/kilo.

Commercial fund

1934: The commercial price of sour rye baked bread (khleb pechenyi rzhanoi kislyi) in Stalingrad Krai in February 1934 was R 0.50/kilo.⁴⁵ The same price was also charged in October 1934 in Gorkii Krai.⁴⁶ The latter also says that this price was introduced by Narkomsnab Order No 1813 on 9/11/33. Another source registers no change in the commercial price of rye bread in 1934.⁴⁷ On the basis of this information it is assumed that the price of R 1.50/kilo held throughout 1934.

Unitary price

1935: A unitary price for all types of bread, divided into the same eight regional belts that applied to flour, was introduced on 1/1/35.⁴⁸ In the table below, line 1 lists the prices in operation from 1/1/35.⁴⁹ Line 2 gives the prices in operation from 1/10/35, (the same source for line 2 also confirms that the prices introduced in January 1935

were still in operation up to the end of September of that year):

	I	II	III	IV	V	VI	VII	VIII
1/1/35 - 30/9/35	0.80	0.90	1.00	1.10	1.20	1.25	1.30	1.50
1/10/35 onwards	0.60	0.75	0.85	0.95	1.05	1.10	1.15	1.35

Note that the same reduction of R 0.15/kilo was applied to the prices in Belts II-VIII, and that R 0.20/kilo was the reduction for Belt I; see sections on flour, groats and rice for comments on the frequency of this practice.

Taking the prices in the table above we can now calculate the average annual belt prices for 1935 (it is assumed that the prices did not change after October - see section on 1936-37):

I	II	III	IV	V	VI	VII	VIII
0.75	0.86	0.96	1.06	1.16	1.21	1.26	1.46

These prices do not include any extra charges for cartage.

1936-37: The same prices as those set in October 1935 were still in operation in the second half of 1936, but Belt VIII had been abolished.⁵¹ The rearrangements in the composition of some of the belts, as listed for flour, also applied to bread. The prices for Belts II, III, V and VII established in October 1935 were still in operation up to the end of 1937.⁵² On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged in this period.

It is assumed that no extra cartage charges were levied in 1936-37.

Annual average price

1934: The normal fund price of R 0.27/kilo was in operation for the first five months, and R 0.52/kilo for the remaining seven. This gives an annual average normal fund price of R 0.42/kilo. This includes an extra charge of R 0.02/kilo for the defrayment of cartage charges within the 7-30km radius.

The commercial fund price was R 1.50/kilo throughout the year.

1935: Taking the average belt prices for 1935 (see above), and using the weights for each belt given in section 1 (rye flour, see above), we get the following average urban and rural USSR unitary

price paid by the peasantry in 1935: R 0.93/kilo. No extra charges for cartage within the 7-30km radius have been included.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, taking the prices in operation from 1/10/35 onwards and weighting these by the two sets of percentage weights given in section 1 we get the following two prices for 1936: R 0.82/kilo for the first six months (eight belts), and R 0.81/kilo for the last six months (seven belts), giving an average urban and rural USSR unitary price paid by the peasantry for the year of R 0.82/kilo. The same price, R 0.82/kilo, applied in 1937. No extra charges for cartage within the 7-30km radius have been included.

See Chapter 3 for the calculation of the average price paid by the peasantry in the urban and rural sectors.

4 Wheat bread (85%)

Normal fund

1934: As in the case of rye bread it appears that the price of wheat bread made from 85 per cent extraction flour (khleb pshenichnyi iz muki 85% pomola), was constant from late August 1933 to the end of May 1934. This assumption is also based on the following data: the price of this bread was R 0.60/kilo in mid-August 1933 in Moscow Oblast, Leningrad Oblast, Central Black-Earth Oblast and Ufa City.⁵³ There was also an extra charge for the deferment of cartage charges of R 0.02/kilo within the 7-30km radius. The price of R 0.60/kilo was also in operation in the areas covered by the following sources in 1934: West Siberian Krai in January, and Leningrad and Gorkii Krai in April.⁵⁴ From 1st June of that year, the price of this bread was increased to R 1.20/kilo.⁵⁵ This price was also in operation in Gorkii Krai and Azov-Black Sea and North Caucasus Krai, in October and November of that year.⁵⁶ An extra cartage charge of R 0.02/kilo was added in the 7-30km radius. It is assumed on the strength of this information that the price of this bread was changed once in 1934, on 1/6/34. This gives an average price for the year of R 0.97/kilo (including the extra charge of R 0.02/kilo in the 7-30km radius).

Commercial fund

1934: The commercial price of wheat bread made from 85 per cent extraction flour (pshenichnyi khleb iz muki 85% pomola) in Gorkii Krai in October 1934 was R 3.00/kilo, introduced by Narkomsnab Order No 1813 on 9/11/33).⁵⁷ SOT-36 indicates that the commercial price of "wheat bread" did not change in 1934.⁵⁸ This suggests that the price of R 3.00/kilo held throughout this year, and this is confirmed by KOL which shows that the commercial price of wheat bread remained at 75.5-75.9 per cent of its March 1933 level throughout 1934.⁵⁹ EPS also confirms that the price of this bread was R 3.00/kilo in 1934.⁶⁰ On the basis of this information it is assumed that the price of R 3.00/kilo held throughout 1934.

Unitary price

1935: A unitary price for all types of bread, divided into eight regional belts, was introduced on 1/1/35.⁶¹ The belts were the same as those for flour; see section on rye flour for description of the areas covered. In the table below, line 1 is from DRZ, it lists the prices in operation from 1/1/35 (rubles/kilo).⁶² Line 2 is from SZR No 51, it gives the prices of this type of bread that were in operation from 1/10/35 (it also confirms that the prices introduced in January 1935 were still in operation up to the end of September of that year):⁶³

	I	II	III	IV	V	VI	VII	VIII
1/1/35 - 30/9/35	1.20	1.80	2.00	2.20	2.40	2.50	2.60	2.80
1/10/35 onwards	0.95	1.50	1.70	1.90	2.10	2.20	2.30	2.50

Note that a reduction of R 0.30/kilo has been applied to Belts II-VIII, and of R 0.25/kilo to Belt I; see sections on flour, groats and rice for the relevance of this..

Using this data we can now calculate the average annual belt prices for 1935 (it is assumed that the prices did not change after October - see section on 1936-37):

I	II	III	IV	V	VI	VII	VIII
1.14	1.73	1.93	2.13	2.33	2.43	2.53	2.73

These prices do not include any extra charges for cartage.

1936-37: SBO confirms that the same prices as those set in October 1935 were still in operation in the second half of 1936, but that Belt VIII had been abolished and that the rearrangements in the composition of some of the belts, as listed for flour, also applied to bread.⁶⁴ STA-38, SOR and ARK-38 indicate that the prices in Belts II, III, V and VII established in October 1935 were still in operation up to the end of 1937.⁶⁵ On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged in this period. It is assumed that no extra cartage charges were levied in 1936-37.

Annual average price

1934: The normal fund price for the first five months was R 0.62/kilo, and in the remaining seven months - R 1.22/kilo. This gives an average normal fund price of R 0.97/kilo (including an extra charge of R 0.02/kilo for the defrayment of cartage charges within the 7-30km radius).

The commercial price throughout the year was R 3.00/ kilo.

1935: Taking the average belt prices for 1935 presented above, and the regional weights presented in section 1, we get an average urban and rural unitary USSR price paid by the peasantry in 1935 of R 1.86/kilo. No extra charge for cartage has been included.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, taking the percentage weights given in section 1 (rye flour, see above), and the belt prices in operation from 1/10/35 onwards, we get the following average prices for the two periods in 1936: R 1.63/kilo for the first half of 1936 (eight belts), and R 1.60/kilo for the second half of 1936 (seven belts), giving an average urban and rural USSR unitary price paid by the peasantry of R 1.62/kilo. The price of R 1.60/kilo applied from June 1936 and throughout 1937.

No extra charge for cartage has been included.

See Chapter 3 for calculations of the average price paid in the urban and rural sectors by the peasantry.

5 Ground millet, 1st sort

Normal fund

1934: The price of 1st sort ground millet (psheno tolchenoe 1 sort) in Leningrad Oblast on 20/9/33 was R 0.29/kilo within a radius of 7-30km of a railway station or wharf, and R 0.27 within a radius up to 7km.⁶⁶ In Central Black-Earth Oblast the price of 1st sort ground millet in late August 1933 was also R 0.27 within a radius up to 7km, but it was R 0.30/kilo within the 7-30km radius.⁶⁷ The same source indicates that this price was introduced on 25/7/33. The same base price and an extra cartage charge of R 0.05/kilo were also charged in late 1933 in the Bashkir ASSR.⁶⁸ In 1934 the same base price was charged in the areas listed below: West Siberian and Stalingrad Krai in January; Leningrad and Gorkii Krai in April; Moscow in June; Gorkii Krai in October; and Azov-Black Sea and North Caucasus Krai in late 1934.⁶⁹ The average extra cartage charge in the 7-30km radius in these areas and those quoted earlier was R 0.04/kilo. On the basis of this data it is assumed that the price of R 0.027/kilo was left unchanged in 1934 and that the average cartage charge was R 0.04/kilo, giving a final price of R 0.31/kilo.

Commercial fund

1934: According to STA-34 the "commercial fund" price of 1st sort ground millet (psheno tolch., 1 sort) in February 1934 was R 3.50/kilo, and this and the normal fund price was introduced by Resolutions of the Council of Labour and Defence No 611 23/7/33, and of Narkomsnab No 317.⁷⁰ GOR-34 notes that the price of the same good was R 5.00/kilo in October 1934 and that the price was introduced by Resolution of the Committee of the Commodity Fund and Retail Trade attached to the Council of Labour and Defence No 119.⁷¹ TSN confirms that this price was in operation in Central Black-Earth Oblast in April 1934, and PR-34 - the USSR in late 1934.⁷² It seems reasonable to assume that the price was not changed in March 1934, or in November and early December of the same year (when the Council of People's Commissars adopted the resolution on abolishing normal fund and commercial prices for groats). Thus we assume that the price of R 3.50/kilo held for the first three months of 1934, and R 5.00/kilo for the remaining nine months.

Unitary price

1935: Unitary retail prices for groats, divided into the same eight regional belts as for flour, were introduced on 1/1/35.⁷³

The following are the prices observed so far: the price of first sort ground millet (psheno tolchenoe, 1-go sorta) in Western Oblast (Belt III) on 10/1/35 was R 3.00/kilo.⁷⁴ The price in the Georgian SSR (Belt III) was also R 3.00 up to April.⁷⁵ In the table below this price comprises line 1. Line 2 gives the prices introduced on 29/4/35;⁷⁶ line 3 gives the pre-October prices;⁷⁷ which were introduced on 1/6/35;⁷⁸ and line 4 the prices in operation from 1st October.⁷⁹

	I	II	III	IV	V	VI	VII	VIII
1 1/1/35 - 30/4/35	-	-	3.00	-	-	-	-	-
2 1/5/35 - 30/5/35	2.10	2.45	2.70	2.80	2.90	3.00	3.10	3.20
3 1/6/35 - 30/9/35	1.60	1.95	2.20	2.30	2.40	2.50	2.60	2.70
4 1/10/35 onwards	1.50	1.85	2.10	2.20	2.30	2.40	2.50	2.60

As far as can be ascertained these were the only occasions in 1935 when the price of ground millet was changed.

As in the case of flour, we can see that the price reductions listed above show a remarkable uniformity between the belts. Thus, on 1st June the price in all belts fell by R 0.50/kilo, and on 1st October - by R 0.10/kilo. Assuming that this uniformity was also observed on 1st May we give an approximation of the prices prevailing before this time by adding R 0.30 to the prices in line 2 (this is the reduction shown for Belt III between April and May), this gives us the following prices assumed to be in operation from January to end of April:

I	II	III	IV	V	VI	VII	VIII
2.40	2.75	3.00	3.10	3.20	3.30	3.40	3.50

Taking these prices to be in operation for the first four months of 1935, line 2 to be in operation for one month, line three to be in operation for four months and line four - three months, we get the following annual average belt prices for 1935 (rubles/kilo):

I	II	III	IV	V	VI	VII	VIII
1.88	2.23	2.48	2.58	2.68	2.78	2.88	2.98

The prices do not include extra cartage charges, which operated in some areas.

1936-37: The same changes in the composition of the regional belts listed for rye flour also applied to ground millet (see section on rye flour).

SBO indicates that the prices in Belts I-VII in mid-1936 were the same as those introduced in October 1935 (Belt VIII had been abolished - see section on rye flour). The prices in Belts II, III, V and VII were unchanged from this level up to the end of 1937.⁸⁰ On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged between 1/10/35 and 31/12/37. It is assumed that no extra cartage charges were levied in 1936-37.

Annual average price

1934: The average normal fund price in this year was R 0.31/kilo, including an extra charge for the defrayment of cartage of R 0.04/kilo. The commercial fund price was R 3.50/kilo for the first three months and R 5.00/kilo for the remaining nine months. This gives an average price of R 4.63/kilo. No extra charge for the defrayment of cartage charges was levied.

1935: Taking the average belt prices for 1935 given above, and the regional weights for the belts given in section 1 (rye flour, see above), we get an average urban and rural USSR unitary price paid by the peasantry in 1935 of R 2.37/kilo. No extra charge for cartage was added.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, taking the percentage regional weights given for the first and second halves of 1936 (see section 1 above), and the belt prices for ground millet that applied from 1/10/35 onwards, we get the following prices for 1936: R 1.99/kilo in the first half of 1936 (eight belts), and R 1.97/kilo in the second half (seven belts), giving an average urban and rural USSR unitary price paid by the peasantry in 1936 of R 1.98/kilo. The price of R 1.97/kilo was in operation for the second half of 1936 and throughout 1937.

No extra charge for cartage has been added.

See Chapter 3 for calculations of the average prices paid by the peasantry in the urban and rural sectors.

6 Buckwheat groats

Normal fund

1934: The price of hulled buckwheat groats (krupa grechnevaya yadritsa) in Leningrad Oblast on 20/9/33 was R 0.32/kilo within a radius of up to 7km of a railway station or wharf, and R 0.34 within a 7-30km radius.⁸¹ In Central Black-Earth Oblast, the price of hulled buckwheat groats in late August 1933 was also R 0.32 within the 0-7km radius, and R 0.35/kilo in a 7-30km radius.⁸² This price was introduced on 25/7/33. The same base price and an extra cartage charge of R 0.05/kilo were also charged in late 1933 in the Bashkir ASSR.⁸³ In 1934 the same base price was charged in the following areas: West Siberian and Stalingrad Krai in January;⁸⁴ Leningrad and Gorkii Krai in April;⁸⁵ Moscow in June;⁸⁶ and Gorkii Krai in October.⁸⁷ For Azov-Black Sea and North Caucasus Krai in late 1934 a base price of R 0.34/kilo is quoted.⁸⁸ This is probably a misprint, as the same delivery price for the other regions was used as the basis for this, and the retail price was supposedly in operation since August 1933. As in the case of ground millet the average extra cartage charge within the 7-30km radius is assumed to be R 0.04/kilo, and the price is assumed to have held throughout 1934.

Commercial fund

1934: STA-34 says that the "commercial fund" price of hulled buckwheat (grecha yadritsa) in February 1934 was R 4.00/kilo, and that this price was introduced by Resolutions of the Council of Labour and Defence No 611 23/7/33, and of Narkomsnab No 317 27/7/33.⁸⁹ TSN says that the commercial price of this good was R 7.00/kilo in June 1934 and the price was introduced by Resolution of the Committee of the Commodity Fund and Retail Trade No 119 7/4/34.⁹⁰ The same price was in operation in October and November 1934.⁹¹ It is assumed that the price was not changed in March or in November and early December, when the Council of People's Commissars adopted a resolution abolishing commercial prices for this good.

Unitary price

1935: Unitary prices for groats divided into the same eight regional belts as for flour, were introduced on 1/1/35.⁹² The following are the prices observed for buckwheat groats so far (rubles / kilo):

		I	II	III	IV	V	VI	VII	VIII
1	1/1/35 - 30/4/35	-	-	5.00	-	-	-	-	-
2	1/5/35 - 30/9/35	4.00	4.25	4.50	4.60	4.70	4.80	4.90	5.00
3	1/10/35 onwards	3.80	4.05	4.30	4.40	4.50	4.60	4.70	4.80

The price for Belt III line 1 was taken from SMO, which noted that it was in operation in Western Oblast (Belt III) on 10/1/35.⁹³ The same price was in operation in the Georgian SSR (Belt III) in April 1935.⁹⁴ Lines 2 and 3 are from SZR No 51, which says that line 2 was in operation before October and line 3 - from October, and BVN No 11 confirms that the prices in line 2 were in operation from beginning of May.⁹⁵ As in the case of ground millet the price fall shown in lines 2 and 3 is uniform (R 0.20/kilo), so it has been assumed that the fall in April/May was also uniform at R 0.50/kilo. This sum has been applied to line 2 to give an approximation of the prices prevailing in January-April. These are presented below:

I	II	III	IV	V	VI	VII	VIII
4.50	4.75	5.00	5.10	5.20	5.30	5.40	5.50

Taking these prices to be in operation in the first four months of 1935, the prices in line 2 of the table above to be in operation for five months, and those in line 3 - three months, we get the following annual average belt prices (rubles/kilo).

I	II	III	IV	V	VI	VII	VIII
4.12	4.37	4.62	4.72	4.82	4.92	5.02	5.12

The prices do not include extra cartage charges, which operated in some areas; see section on rye flour.

1936-37: The same changes in the composition of the regional belts listed for rye flour also applied to buckwheat groats. SBO indicates that the prices in Belts I-VII in mid-1936 were the same as those introduced in October 1935 (Belt VIII had been abolished, see section on rye flour).⁹⁶ STA-38, SOR, and ARK-38 indicate that the prices in Belts II, III, V and VII were unchanged from their October 1935 level up to the end of 1937.⁹⁷ On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged between 1/10/35 and 31/12/37. It is assumed that no extra cartage charges were levied in 1936-37; see section on rye flour.

Annual average price

1934: The normal fund price throughout the year was R 0.36/kilo, including an extra charge for the defrayment of cartage of R 0.04/kilo within the 7-30km radius.

The commercial fund price was R 4.00/kilo for the first three months (approximately) of the year, and R 7.00/kilo for the remaining nine. This gives an average of R 6.25/kilo for the year. There was no extra charge levied for the defrayment of cartage costs within the 7-30km radius.

1935: Taking the average belt prices for 1935 (see above) and applying the average weights to each belt as given in section 1 (rye flour, see above), we obtain an annual average urban and rural USSR unitary price paid by the peasantry of R 4.52/kilo. No extra charges for cartage have been added.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, taking the percentage weights given in section 1 (see above) for the first and second halves of 1936, and applying the belt prices in operation from 1/10/35 onwards, we obtain the following prices for the two periods of 1936: R 4.20/kilo for the first half of 1936 (based on eight belts), and R 4.18/kilo in the second half (based on seven belts), giving an average urban and rural USSR unitary price paid by the peasantry for the year of R 4.19/kilo. The price of R 4.18/kilo applied from the end of June 1936 and throughout 1937. No extra charges for cartage have been added.

See chapter 3 for the average price paid in the urban and rural sectors.

7 Rice, 1-2 sort

Normal fund

1934: According to STA-34 the price of first sort Kazakhstan, ZSFSR and Central Asian rice (ris kazakstanskii, ZSFSR, sredne aziat., 1 sort), in Stalingrad Krai in February 1934 was R 1.15/kilo, and that for second sort - R 1.05/kilo.⁹⁸ These prices were introduced by Narkomsnab Resolution No 455 on 11/11/33. The following sources confirm that these prices were in operation in their respective areas in 1934: NOV-33 in January; LEN-34 and GK-34 in April; MOS-34 around June; TTR in the second half of 1934; GOR-34 in October.⁹⁹ ROS-34 lists a price for these types of rice R 0.02/kilo higher than

that quoted above.¹⁰⁰ Given the uniformity of prices presented, and the fact that the same resolution was used as the basis of the ROS-34 price, it seems likely that this was an anomaly, and it has been omitted from the price calculation. From the data above it seems that the average price of these types of rice was R 1.10/kilo up to October 1934. The average of cartage charges listed for GOR-34, TTR, ROS-34 and LEN-33 was R 0.03/kilo within the 7-30km radius.¹⁰¹ It is assumed that the price did not change between late October and the beginning of December, when the resolution on abolishing normal fund prices was adopted.

Commercial fund

1934: In October 1934 the prices of first and second sort rice (ris 1 sort, 2 sort) were R 10.00/kilo and R 9.00/kilo respectively, in Gorkii Krai, and they were introduced by Narkomvnutorg Resolution No 9 9/9/34.¹⁰² PR-34 confirms that this price was in operation at least in November 1934 in the USSR.¹⁰³ KOL says that the free sale price of rice in 1934 showed the following trend (prices in second quarter of 1934 = 100):¹⁰⁴

III	IV
94.6	81.8

Assuming that the price in the fourth quarter was R 9.50/kilo on average, which seems reasonable given the evidence above that the price was in operation in November 1934, we get a price of R 11.61/kilo for the second quarter and R 10.98/kilo in the third quarter. STA-34 gives an average price for first and second sort rice of R 5.25 in February 1934, and says that this was based on Narkomsnab Resolution No 455 11/11/33.¹⁰⁵ It seems in order to use this price as the average for the first quarter of the year, since it was probably in operation for two of the three months in question. Thus, taking an average of the prices quoted - R 5.25, R 11.61, R 10.98 and R 9.50 - we obtain an annual average price of R 9.34/kilo.

Unitary price

1935: Unitary prices for rice, divided into the same eight regional belts as for flour, were introduced on 1/1/35.¹⁰⁶ The following are the prices observed for 1st and 2nd sort rice in 1935:

	I	II	III	IV	V	VI	VII	VIII
1 1/1/35-7/5/35 1 sort	-	-	10.00	-	-	-	-	-
2 sort	-	-	9.00	-	-	-	-	-

			I	II	III	IV	V	VI	VII	VIII
2	8/5/35-30/9/35	1 sort	5.00	8.00	8.00	8.00	8.00	8.00	7.50	8.00
		2 "	4.50	7.00	7.00	7.00	7.00	7.00	6.50	7.00
3(a)	1/10/35 -	1 "	4.00	6.50	6.50	6.50	6.50	6.50	6.00	6.50
	onwards	2 "	3.50	5.50	5.50	5.50	5.50	5.50	5.00	5.50
3(b)	Average	1 "	3.75	6.00	6.00	6.00	6.00	6.00	5.50	6.00
	of 3(a)									

The prices for Belt III, line 1, were taken from SMO, which says that the prices were in operation in Western Oblast (Belt III) on 10/1/35.¹⁰⁷

It is assumed that the next change in prices occurred on 8/5/35.¹⁰⁸

SZR No 51 indicates that a further price change occurred on 1/10/35 (line 3), and that the prices in line 2 were in operation up to this time.¹⁰⁹

As in the case of flour, bread and groats, we can observe a uniformity in the fall in prices in 1935. Thus, in October the price fell by R 1.50/kilo for both types of rice in Belts II-VIII and R 1.00/kilo in Belt I. Taking the R 2.00/kilo price fall observed between lines 1 and 2 we shall assume that this occurred for all of the prices in Belts II-VIII, and that the fall in Belt I was R 1.50/kilo, giving the following prices for January-May 1935:

	I	II	III	IV	V	VI	VII	VIII
1 sort	6.50	10.00	10.00	10.00	10.00	10.00	9.50	10.00
2 sort	6.00	9.00	9.00	9.00	9.00	9.00	8.50	9.00

It is believed that the estimated prices for Belts II-VIII presented above will be close if not identical with the prices prevailing.

This is based on observation of rice prices at this time and the uniformity of these prices. The Belt I price may vary significantly from that presented above, but it is believed that this will have a negligible effect on our final results.

Using the prices presented in the two tables above we can calculate the annual average prices for 1935. In the table below it has been assumed that the estimated prices were in operation for four months, the prices in line 2 of the first table were in operation for five months and those in line 3 - three months:

	I	II	III	IV	V	VI	VII	VIII
1 sort	5.25	8.29	8.29	8.29	8.29	8.29	7.79	8.29
2 sort	4.75	7.29	7.29	7.29	7.29	7.29	6.79	7.29
average	5.00	7.79	7.79	7.79	7.79	7.79	7.29	7.79

These prices do not include extra cartage charges, which operated in some areas; see section on rye flour.

1936-37: The same changes in the composition of the regional belts listed for rye flour also applied to rice.

SBO indicates that the prices in Belts I-VII in mid-1936 were the same as those introduced in October 1935 (Belt VIII had been abolished -see section on rye flour).¹¹¹ On the basis of this it has been assumed that all of the prices in Belts I-VII remained unchanged between 1/10/35 and 31/12/37. It is assumed that no extra cartage charges were levied in 1936-37; see section on rye flour.

Average annual price

1934: The normal fund price throughout the year was R 1.13/kilo including an extra charge for cartage of R 0.03/kilo within the 7-30km radius.

The average commercial price was R 9.34/kilo. There was no extra charge levied for cartage within the 7-30km radius.

1935: Taking the average belt prices for 1935 presented above, and applying the percentage weights to each of the belts given in section 1 (rye flour, see above), we obtain an annual average urban and rural USSR unitary price paid by the peasantry of R 7.62/kilo. No extra charges have been added for cartage.

1936 and 1937: It is assumed that Belt VIII was abolished at the end of June 1936. Thus, taking the percentage weights for each of the belts in the first and second halves of 1936 given in section 1 (rye flour, see above), and prices in operation from 1/10/35 onwards, we obtain the following prices: R 5.86/kilo in the first half of 1936 (eight belts), and R 5.87/kilo for the second half of 1936 (seven belts), giving an average urban and rural USSR unitary price paid by the peasantry in 1936 of R 5.87/kilo. The same price applied throughout 1937. No extra charges for cartage have been added. See Chapter 3 for the average price paid in the urban and rural sectors.

8 Melted butter

Normal fund

1934-35: According to Chapman melted butter (maslo toplenoe) was divided into highest, first, second and third sorts, prior to July 1935.¹¹² After this date the same four grades were redesignated extra, highest, first and second sort. Chapman says that an equivalent of first sort in 1928 was an average of highest and first prior to July 1935 and extra and highest after this date. The following is the case regarding the areas in this study: In late August 1933 there were three sorts of melted butter sold in Central Black-Earth Oblast - first, second and third sorts;¹¹³ the same three sorts were also sold in Leningrad Oblast on 20/9/33.¹¹⁴ It is assumed that first and second sorts are not the same as those described by Chapman and in operation in 1928.¹¹⁵ In this case Chapman used the first sort price. We shall use first and second sort. In both oblasts the price of first sort was R 6.90/kilo and second sort - R 6.50, and there did not appear to be an extra charge for cartage. VOR says that this price was introduced on 22 February 1933.¹¹⁶ In Gorkii Krai in October 1934,¹¹⁷ and Azov-Black Sea and North Caucasus Krai in September-November 1934,¹¹⁸ the same three sorts were in operation; the price of first sort was R 6.80/kilo and second sort R 6.50/kilo. This price was introduced by Narkomsnab Resolution No 533 31/12/33, and GOR-34 confirms that it was unitary for all areas of the krai regardless of geographical situation.¹¹⁹ At various times in 1934 the same prices were charged in the areas covered by the following sources: MOS-34, LEN-34, and GK-34.¹²⁰ On 10/1/35 the same three sorts were sold in Western Oblast. The price of first sort was R 6.80/kilo and second sort - R 6.50, and it is confirmed that the price was introduced by Resolution No 533.¹²¹ The same prices and sorts were in operation in West-Siberian Krai in February 1935. In the Georgian SSR in June 1935 the price of highest sort was also R 6.80/kilo and that of first sort R 6.50 (the same as that for second sort in GOR-34, ROS-34 and SMO, see above), and the basis of the price was also Resolution No 533.¹²² This source says that the sorts of butter described were introduced according to Narkomsnab Order No 1598 23/6/34. However, none of the other 1934 and 1935 handbooks were operating this system of grading, even though they were using the same prices. There does not seem to be an adequate explanation for

this situation.

Given the fact that highest and first sorts had the same prices as first and second sorts prior to this period, it is assumed that they are equivalents of each other - this is also confirmed by the fact that the same pricing legislation was used in both cases, only the grading seems to have changed. For 1934 the average price of R 6.65/kilo is assumed to have been in operation throughout the year.

For 1935 the situation is as follows: it is known that the average price of R 6.65/kilo was in operation up to June, and that from 1/10/35 a unitary price was introduced.¹²³ It is assumed that no change in the normal fund price of melted butter took place between June and October of that year. It should be borne in mind, however, that a change could have been introduced, but that no evidence of this has been uncovered so far, and given the stability of unitary prices it seems unlikely.

Commercial fund*

1933-34: There is little or no information on commercial prices for melted butter (maslo toplenoe) in this period. It is known that in August 1933 the price of first and second sorts was R 20/kilo and R 17.00/kilo respectively in Central Black-Earth Oblast.¹²⁴ In October 1934 the prices of higher and first sorts were R 27.00/kilo and R 24.00/kilo in Western Oblast.¹²⁵ In December 1934 the price of higher sort was R 30.00/kilo and that of first sort - R 27.00/kilo in Georgian SSR.¹²⁶ The data presented above is insufficient to enable us to formulate an approximate picture of the commercial price of melted butter.

1935: No data has been uncovered so far.

* It is possible that the commercial price of butter (and presumably butter products) may have been established for individual cities. Thus, commercial prices for butter changed frequently and by different percentages in Dnepropetrovsk, Moscow and Leningrad, and Gorkii and Ivanovo from late 1933 to October 1935.¹²⁷

Unitary price

1935: From 1/10/35 a unitary price, divided into five belts, was established.¹²⁸ The belts and prices were as follows (rubles/kilo):

Belt I - West-Siberian Krai, Far Northern Krai,

Chelyabinsk Oblast, Kazakh ASSR, Omsk Oblast, Bashkir

ASSR, Tatar ASSR

Extra sort - R 19.50, higher sort - R 17.00

Average - R 18.25

Belt II - Sverdlovsk Oblast, Gorkii Krai, Ivanovo Oblast,

Kirov Krai, Voronezh Oblast, Kursk Oblast, Azov-Black Sea

Krai, Kalinin Oblast, Western Oblast, Belorussian SSR,

Ukrainian SSR

Extra sort - R 20.00, higher sort - R 17.50

Average - R 18.75

Belt III - North Caucasus Krai, Saratov Krai, Stalingrad Krai,

Kuibyshev Krai, East Siberian Krai, Orenburg Oblast, Krasnoyarsk Krai,

Buryat - Mongolian ASSR, Yakut ASSR

Extra sort - R 21.00, higher sort - R 18.00

Average - R 19.50

Belt IV - Moscow Oblast, Leningrad Oblast, Donbass, Crimean

and Karelian ASSRs

Extra sort - R 22.00, higher sort - R 18.50

Average - R 20.25

Belt V - Far-Eastern Krai, Uzbek SSR, Tadzhik SSR, Turkmen SSR,

Kirgiz ASSR, Kara-Kalpak ASSR, ZSFSR

Extra sort - R 25.00, higher sort - R 21.50

Average - R 23.25

It is believed that these prices were in operation for the rest of 1935; see section on 1936-37 for confirmation.

These prices do not include extra cartage charges.

1936-37: Chapman says that the Belt III prices listed for October 1935.

and which were in operation in Moscow in mid-1936, were still in

operation in 1937.¹²⁹

This is confirmed by SPR No 14 which shows that the price of melted butter was not affected by the reduction in butter prices introduced in July 1936.¹³⁰

SBO shows no change in the butter prices quoted earlier, up to mid-1936, and ARK-38, SOR and STA-38 show that the prices listed for Belts I, II and III were still in operation at the end of 1937.¹³¹

On the basis of the above it has been assumed that the prices established in October 1935 continued to operate throughout 1936 and 1937.

No extra cartage charges have been included. It is not known whether extra cartage charges were levied on butter in 1935-37. Nor can this be deduced from the practice with other similar goods, since in 1936 vegetable oil and margarine did not have these charges, whereas cheese did.¹³²

Annual average price

1934: The normal fund price was R 6.65/kilo. This did not include an extra charge for the defrayment of cartage.

So far insufficient data on commercial prices has been uncovered to enable a reasonable approximation of this price to be made. Therefore, no estimate of the annual average commercial price for this year is given.

1935: The normal fund price for the first nine months (up to the introduction of unitary prices) was R 6.65/kilo. This did not include an extra charge for the defrayment of cartage.

So far insufficient data on commercial prices in this year has been uncovered. No estimate of the annual average commercial price has been made.

The following was the percentage attached to each of the belts in order to obtain the average unitary price in operation from 1/10/35:

Belts	I	II	III	IV	V
	17.4%	43.0%	14.6%	12.3%	12.7%

(see Appendix Table D1 for the calculations underlying this table)

Using the percentage weights given above we obtain an average urban and rural unitary USSR price paid by the peasantry of R 19.53/kilo.

This was in operation throughout 1936 and 1937.

No extra charge for cartage has been added.

See Chapter 3 for the calculation of the average price paid by the peasantry in rural and urban trade.

9 Sunflower oil

Normal fund

1934-35: SMO says that the village price of refined sunflower oil (maslo podsolnechnoe, rafinirovannoe) in Western Oblast on 10/1/35 was R 2.70/litre, and that this price was based on Committee of the Commodity Fund Resolution No 225 26/12/32.¹³³ There was also an extra

cartage charge of R 0.03/litre within a radius of 7-30km of a railway station or wharf. The same price and extra cartage charge was also in operation in Central Black-Earth Oblast in late August 1933;¹³⁴ Gorkii Krai in October 1934;¹³⁵ Azov-Black Sea and North Caucasus Krai in September-November 1934;¹³⁶ Western Siberian Krai in February 1935;¹³⁷ and throughout the USSR in early 1934.¹³⁸ The same price was also in operation in Leningrad Oblast on 20/9/33;¹³⁹ Stalingrad Krai in January 1934;¹⁴⁰ Leningrad;¹⁴¹ and Gorkii Krai in April;¹⁴² and Moscow in June;¹⁴³ but there was no extra charge for cartage listed. LEN-33 also notes that the listing of oil prices in kilogrammes was purely for administrative purposes and that retail sales had to be made in litres.¹⁴⁴ In the Georgian SSR at the end of June 1935 there were six belts for this type of oil, ranging from R 2.70/litre in Belt 0 to R 2.80/litre in Belt 5.¹⁴⁵ The Belt 2 price was R 2.73/litre, and the basis of these prices was the same resolution of the Committee of the Commodity Fund as above.

It appears that the same legislation with regard to prices was in operation from the beginning of 1933 up to the end of June 1935 in all of these areas. The only differences are the belt prices in the Georgian SSR (presumably to take into account the geographical conditions of that republic), and the absence of cartage charges in some areas. Given the broad uniformity and stability of the price I have assumed that R 2.70/litre was in operation in all of the areas and that an average cartage charge of R 0.03/litre was in operation. It is also assumed that this price was not changed up to the introduction of a unitary price for vegetable oils on 1/10/35.

It is assumed that the above prices refer to refined sunflower oil, in bulk (nerasfasovannoe), although the original sources do not actually mention this. There is little reason to believe that these prices refer to bottled oils, since there is no mention of either bottles or charges.

Commercial fund

1934-35: Beginning with 1934, according to SMO the free sale price (commercial price) of refined sunflower oil, in bulk (maslo podsol-nechnoe rafirovan. nerasfasovannoe) was R 22.00/kilo in Western Oblast on 10/1/35 and the price was established by Narkomsnab instruction of 31/7/34.¹⁴⁶ The same price was given in PR-34 in late 1934, which indicates that this price applied throughout the Soviet

Union.¹⁴⁷ According to Malafeev the commercial price of "vegetable oil" (maslo rastitel'noe) in the third and fourth quarters of 1934 was 69.4 per cent of the price prevailing in May 1933, and in quarters one and two it was 79.8 per cent and 77.9 per cent of the May 1933 price, respectively.¹⁴⁸ Given that the commercial price was R 22.00/kilo throughout the last quarter of 1934 (and for two-thirds of the third quarter), this implies a May 1933 price of approximately R 31.70/kilo, and an approximate price in quarters one and two of 1934 of R 25.30/kilo and R 24.69/kilo. Assuming that the price in the last two quarters of 1934 was R 22.00/kilo (as Malafeev's figures suggest), we obtain an annual average price in 1934 of R 23.50/kilo. LEN-33 notes that sunflower oil had to be sold in litres, and the litre price was 7.5 per cent lower than that per kilo. This gives a price of R 21.74/litre.¹⁴⁹

It should be borne in mind that this is an approximate price and may distort the price comparison. However, it does appear that it is a reasonable approximation of the price existing at this time. For example, the fall in price between the first and last quarters of 1934 was 13 per cent and according to SOT-35 the price of unrefined vegetable oil fell by 11.9 per cent in 1934, which is fairly close. A further check can be made by the following calculation: According to Bolotin the proportional relationship between normal and commercial prices for refined sunflower oil (maslo podsol., rafinirov.) in Moscow and Leningrad was 1:9.2 on 1/1/34 and 1:8.2 on 1/10/34.¹⁵⁰ Given that throughout this period the normal urban price of refined sunflower oil was R 2.92/kilo,¹⁵¹ this implies a commercial price on 1/10/34 of R 23.94/kilo. SMO gives a free sale price for refined sunflower oil in bottles (v butylkakh) of R 24.00/kilo as being in operation from 31/7/34, and PR-34 confirms that this price was in general operation in late 1934. (Note that this price was R 2.00/kilo more expensive than the bulk price of the same oil at this time.)¹⁵² The Bolotin data also implies that the commercial price of refined sunflower oil on 1/1/34 was R 27.16/kilo, which is almost R 2.00 greater than the price calculated above for refined sunflower oil in bulk in the first quarter of 1934 (R 25.30/kilo). This appears to support the approximate nature of the calculated prices and the general trend.

For 1935 the price of R 22.00/kilo for refined sunflower oil in bulk, quoted by SMO as being in operation on 10/1/35, appears to have been

in operation up to the introduction of unitary prices on 1/10/35, since URA-35 gives the same price for September of that year.¹⁵³ So, taking a commercial price of R 22.00/kilo and reducing it by 7.5 per cent we get the price per litre of R 20.35.

Unitary price

1935-37: On 1/10/35 a unitary price, divided into four belts, was established for sunflower oil refined, in bulk (maslo podsolnechnoe, rafinirovannoe, nerasfasovannoe),¹⁵⁴ and was priced as follows per kilo:

<u>Belt I:</u>	Voronezh Oblast, Kursk Oblast, Azov-Black Sea Krai, Saratov Krai, Ukrainian SSR, Stalingrad Krai, Kuibyshev Krai, Orenburg Oblast, North Caucasus Krai, Bashkir ASSR	R 13.00
<u>Belt II:</u>	All krais, oblasts and republics not included in Belts I, III, IV	R 13.50
<u>Belt III:</u>	Uzbek SSR, Turkmen SSR, Tadzhik SSR, Kirgiz SSR, Kara-Kalpak ASSR, Kazakh ASSR	R 13.50
<u>Belt IV:</u>	Far Eastern Krai, West Siberian Krai, Buryato-Mongolian ASSR, Yakut ASSR	R 17.50

Prices per litre were 7.5 per cent lower than those per kilo,¹⁵⁵ this gives the following belt prices per litre:

Belt I	- 12.05
Belt II	- 12.49
Belt III	- 12.49
Belt IV	- 16.19

No extra charges for cartage have been uncovered so far.

It is assumed that these prices applied for the whole of the last quarter of 1935; see section on 1936-37.

Note: The resolution introducing unitary prices for vegetable oils also says that supplies of these oils made to stimulate cotton procurements and oil seed procurements were to be sold at the prices agreed by the original contracts, but only up to 1 January 1936.¹⁵⁶ The level of these prices is not known but it is likely that they were at the old "normal fund" level. Since sales of oil in this manner would have accounted for a minute proportion of retail sales, and would have applied for only three months of 1935, they have not been considered (in 1935 0.9m tonnes of sunflower seeds and 1.7m tonnes of raw cotton were marketed in the USSR).¹⁵⁷

1936-37: SBO shows that the prices established in October 1935 were unchanged in mid-1936; STA-38, ARK-38 and SOR indicate that the prices in Belts I and II were in operation up to the end of 1937; and SRT-39 shows that all of the prices were still in operation in 1939.¹⁵⁸ On the basis of this evidence it is assumed that the October 1935 prices applied up to the end of 1937. The prices listed do not include extra charges for cartage.

Note: Chapman quotes an average Moscow 1937 price of R 14.84/kilo for the same oil, but says that some of the quarterly quotations may refer to bottled oils, as opposed to the bulk oil quoted above.¹⁵⁹ For 1936 Chapman gives R 13.50/kilo as the annual average price for both Moscow and the whole of the USSR.¹⁶⁰ It appears that the misgivings noted by Chapman were in fact correct, since it has already been shown that the Belt II price did not change throughout this period.

Annual average price

1934: The average village normal fund price was R 2.73/litre, including an extra charge of R 0.03/litre levied for the defrayment of cartage in the 7-30km radius.

The commercial price was R 21.74/litre.

1935: The same village normal fund price as in 1934, R 2.73/litre, was in operation up to the introduction of unitary prices on 1/10/35. It appears that a unitary urban commercial price of R 20.35/litre was also in operation in the same period. There was no extra charge for cartage levied in the 7-30km radius .

In the case of the unitary prices introduced on 1/10/35, the following percentage weights have been calculated for each belt:

Belts	I	II	III	IV
	37.9%	42.7%	9.1%	10.3%

See Appendix Table D2 for the basis of these calculations.

Taking the unitary prices per litre in operation from October 1935, we obtain an average urban and rural USSR unitary price paid by the peasantry of R 12.70/litre. No extra charge for cartage has been added.

For the year the average village price was R 5.22/litre, and the average urban price paid by the peasantry - R 18.44/litre.

1936 and 1937: It appears that the same average urban and rural USSR unitary price was in operation in both of these years. No extra charge for cartage has been added.

See Chapter 3 for calculations of the average price paid by the peasantry in 1934-37.

10 Sugar, granulated

Normal fund

1934-35: The village price of granulated sugar (sakhar pesok) in Central Black-Earth Oblast in late August 1933 was R 3.50/kilo plus an extra charge of R 0.05/kilo for cartage within a radius of 7-30km of a railway station or wharf.¹⁶¹ This price was substantially higher than the normal fund price operating in the town. The same price and extra charge for cartage was also charged in Leningrad Oblast on 20/9/33;¹⁶² Gorkii Krai in April and October 1934;¹⁶³ Azov-Black Sea and North Caucasus Krai in September-November 1934;¹⁶⁴ Western Oblast on 10/1/35;¹⁶⁵ and Western Kazakhstan Oblast up to October 1935.¹⁶⁶ It appears from all of these sources that the price was established by Sovnarkom Resolution No 611 23/8/33. The situation in the Georgian SSR was slightly more complicated, presumably because of its geographical conditions. Seven belts were established for the republic, the price in Belt 0 was R 3.50/kilo, and that in Belt I - R 3.58/kilo.¹⁶⁷ It is likely that the belts were established to take account of transport conditions. The basic price, however, was the same as that for the other areas in the study. This gives a normal fund price in 1934 and 1935 (up to the introduction of unitary prices in October), of R 3.55/kilo.

Commercial fund

1934-35: The commercial price of granulated sugar (sakhar pesok) in Central Black-Earth Oblast in late August 1933 was R 13.00/kilo.¹⁶⁸ UZI says that on 1/8/33-1/1/34 commercial prices for sugar did not change,¹⁶⁹ which suggests that this price was in operation in January 1934. SOT-36 notes that the commercial price of "sugar" fell by 50 per cent in 1934, which would give a price at the end of the year - using the data from VOR - of R 6.50/kilo.¹⁷⁰ This is the price in operation in the Georgian SSR from early December 1934.¹⁷¹ One further change in the price has been uncovered. According to

GOR-34 a price of R 10.00/kilo was introduced in Gorkii Krai on 1/9/34.¹⁷² Assuming that the price of R 13.00/kilo held for the first eight months, R 10.00 for the next three months, and R 6.50/kilo for the last month we get an average price for the year of R 11.71/kilo.

PR-34 confirms that the commercial price of granulated sugar in November 1934 was R 10.00/kilo in the following regional belt:¹⁷³ Karelian ASSR, Western Oblast, Leningrad Oblast, Moscow Oblast, Ivanovo Oblast, Gorkii Krai, Chuvash ASSR, Sverdlovsk Oblast, Chelyabinsk Oblast, Bashkir ASSR, Tatar ASSR, Middle Volga Krai, Voronezh Oblast, Kursk Oblast, Saratov Krai, Volga German Republic, Stalingrad Krai, Dagestan ASSR, Azov-Black Sea Krai, Crimean ASSR, Ukrainian SSR, Belorussian SSR, ZSFSR, North Caucasus Krai. A second regional belt, with a price R 2.00/kilo dearer than that listed above, was also given by the same source. This comprised: Northern Krai, Ob'-Irtysk Oblast, Kazakh ASSR, Kirgiz ASSR, Kara-Kalpak ASSR, Western Siberian Krai, Eastern Siberian Krai, Yakut ASSR, Far Eastern Krai, Uzbek SSR, Tadzhik SSR and Turkmen SSR.

URA-35 indicates that a unitary commercial fund price of R 6.50/kilo for this type of sugar operated throughout the USSR in 1935 up to the abolition of sugar rationing in early October.¹⁷⁴ SMO also confirms that the price of R 6.50/kilo was in operation in Western Oblast on 10/1/35.¹⁷⁵

On the basis of the above it has been assumed that the commercial price in the second belt was R 6.50/kilo in December 1934 (ie the unitary commercial price was introduced at this time), and that the R 2.00/kilo differential was maintained for the first 11 months of the year, giving an average price for the first eight months in belt two of R 15.00/kilo, and for the following three months - R 12.00/kilo. The average second belt price in 1934 was R 13.54/kilo.

The commercial price of granulated sugar throughout the USSR in 1935 was R 6.50/kilo.

There were no extra charges levied for the defrayment of cartage within the 7-30km radius.

Unitary price

1935: On 1/10/35 a unitary price, divided into four belts, was established for granulated sugar (sakhar pesok).¹⁷⁶ The belts and

their prices were as follows:

<u>Belt I</u> - Ukrainian SSR, Voronezh and Kursk Oblasts, Azov-Black Sea Krai	R 4.20/kilo
<u>Belt II</u> - Moscow and Leningrad Oblasts, Belorussian SSR, Western Oblast, Kalinin Oblast	R 4.50/kilo
<u>Belt III</u> RSFSR (excluding those areas in the other belts), ZSFSR, Uzbek, Tadzhik and Turkmen SSR,	R 5.00/kilo
<u>Belt IV</u> - West-Siberian and Far-Eastern Krai, Yakut ASSR	R 5.50/kilo

It is assumed that these prices held until 16/12/35 when the following prices were introduced: Belt I - R 3.50/kilo; Belt II - R 3.80/kilo; Belt III - R 4.30/kilo; and Belt IV - R 4.80/kilo,¹⁷⁷ giving average prices of: Belt I - R 4.08; Belt II - R 4.38; Belt III - R 4.88; Belt IV - R 5.38, in the last quarter of 1935. These prices do not include extra charges for cartage. In 1936, according to Chapman,¹⁷⁸ no charges were levied, but it is certainly the case that these charges were levied in 1935.¹⁷⁹ Unfortunately, we have no information on the size of these charges.

1936-37: SBO indicates that the prices established in mid-December 1935 were still in operation in mid-1936.¹⁸⁰ ARK-38, SOR, and STA-38 all indicate that the Belt III price was in operation up to the end of 1937, and SRT-39 shows that all four belt prices applied up to April 1939.¹⁸¹ On the basis of this it is assumed that the price was unchanged from mid-December to the end of 1937.

Chapman says that no extra cartage charges were levied on this good in 1936.¹⁸² It is possible that this was also the case in 1937.

Annual average price

1934: The normal fund price was R 3.55/kilo, including an extra charge of R 0.05/kilo for the defrayment of cartage costs within the 7-30km radius. The average commercial price for 1934 was R 12.16/kilo. This was calculated by giving the average second belt price of R 13.54/kilo a weight of R 3752.3m - the rural retail turnover of the areas comprising this belt in 1934, see Appendix Table D2 . The first belt price of R 11.71/kilo was given a weight of R 11670.9m - the rural retail turnover in 1934 of the remaining areas of the USSR . There was no extra charge levied for cartage.

1935: Up to the introduction of unitary prices on 1/10/35 the village normal fund price was R 3.55/kilo, including an extra charge of R 0.05/kilo for the defrayment of cartage costs within the 7-30km radius. Up to October a unitary commercial price of R 6.50/kilo operated throughout the USSR. There was no extra charge levied in the 7-30km radius for cartage.

The following were the percentages attached to each belt in order to obtain the average unitary price:

Belts	I	II	III	IV
	27.4%	16.9%	48.7%	7.0%

See Appendix D for an explanation of the calculation of these percentages.

Taking the average unitary prices in operation in the last quarter of 1935, and weighting them with the above percentages, we obtain an average urban and rural USSR unitary price paid by the peasantry in the last quarter of 1935 of R 4.61/kilo.

No data on the size of the extra charges levied to defer cartage was available.

The average USSR village price for the year was R 3.82/kilo, and the average urban USSR price paid by the peasantry - R 6.03/kilo.

1936-37: Taking the unitary prices in operation from 16/12/35 and weighting these by the percentages provided above we obtain an average urban and rural USSR unitary price paid by the peasantry of R 4.03/kilo. There was no data available on extra charges levied for cartage. This price was in operation throughout 1936 and 1937.

See Chapter 3 for calculation of the average prices paid in the urban and rural sectors in 1934-37.

11 Sugar, lump

Normal fund

1934-35: The village price of lump sugar (sakhar rafinad) in Central Black-Earth Oblast in late August 1933 was R 4.00/kilo plus an extra charge for cartage of R 0.05/kilo within a radius of 7-30km of a railway station or wharf.¹⁸³ This price was substantially higher than the normal fund price operating in the town. The same price and cartage charge were also in operation in Leningrad Oblast on 10/9/33;¹⁸⁴

Gorkii Krai in April and October 1934;¹⁸⁵ Azov-Black Sea and North Caucasus Krai in September-November 1934;¹⁸⁶ Western Oblast on 10/1/35;¹⁸⁷ and Western Kazakhstan Oblast up to October 1935.¹⁸⁸ It appears from all of these sources that the price was established by Sovnarkom Resolution No 611 23/8/33. In the Georgian SSR there was a different situation, presumably because of its geographical conditions. Seven belts were established for the republic, the price in Belt 0 was R 4.00/kilo, and that in Belt I - R 4.08.¹⁸⁹ It is likely that the belts were established to take account of transport conditions. The basic price, however, is the same as that for the other areas in the study. This gives a normal fund price in 1934 and 1935 (up to the introduction of unitary prices in October), of R 4.05/kilo.

Commercial fund

1933-35: The commercial price of lump sugar (sakhar rafinad) in Central Black-Earth Oblast in late August 1933 was R 15.00/kilo.¹⁹⁰ UZT says that the commercial price for sugar did not change between 1/8/33 and 1/1/34.¹⁹¹ This suggests that the price of R 15.00/kilo was still in operation at the beginning of 1934. According to GOR-34 a commercial price of R 12.00/kilo was introduced in Gorkii Krai on 1/9/34, and TIF shows that the commercial price of this sugar was R 7.50/kilo from early December 1934 to the end of June 1935.¹⁹² SOT-36 confirms that the commercial price of sugar fell by 50 per cent in 1934.¹⁹³ PR-34 indicates that there were two regional belts for the commercial price of sugar in late 1934; see section on granulated sugar for a description of the belts.¹⁹⁴ It confirms that in November 1934 the first belt price was R 12.00/kilo, and that for the second belt - R 15.00/kilo. URA-35 indicates that a unitary commercial fund price of R 7.50/kilo for this type of sugar operated throughout the USSR in 1935 up to the abolition of sugar rationing in early October 1935, and SMO also confirms that the price of R 7.50/kilo was in operation in Western Oblast on 10/1/35.¹⁹⁵

Reference to the regional breakdown of the pricing belts shows that Central Black-Earth Oblast, Gorkii Krai and Western Oblast were all in the first price belt. This gives the following first belt prices quoted above for 1934: R 15.00/kilo, R 12.00/kilo, R 7.50/kilo. As in the case of granulated sugar it is assumed that R 15.00/kilo was

in operation for the first eight months of 1934, R 12.00/kilo for the next three months, and R 7.50/kilo for December. This gives an average price for the year of R 13.63/kilo.

For the second belt it is assumed that the R 3.00/kilo differential was maintained up to December, when the unitary commercial price was introduced. This gives the following prices: January-August - R 18.00/kilo; September-November - R 15.00/kilo; December - R 7.50/kilo. This gives an average price of R 16.38/kilo.

The unitary commercial price for January-September 1935 was R 7.50/kilo.

There was no extra charge for the defrayment of cartage levied in the 7-30km radius.

Unitary price

1935: On 1/10/35 a unitary price, divided into four belts, was established for lump sugar (sakhar rafinad).¹⁹⁶ The belts were the same as those for granulated sugar; see above. The prices were:

Belt I - R 4.50/kilo	Belt III - R 5.30/kilo
Belt II - R 4.80/kilo	Belt IV - R 5.80/kilo

It is assumed that these prices held until 16/12/35, when the following prices were introduced:¹⁹⁷

Belt I - R 3.70/kilo	Belt III - R 4.50/kilo
Belt II - R 4.00/kilo	Belt IV - R 5.00/kilo

The average prices were:

Belt I - R 4.37	Belt III - R 5.17
Belt II - R 4.67	Belt IV - R 5.67

for the last quarter of 1935.

These prices do not include extra charges for cartage. It is known that at least in 1935 extra charges were levied.¹⁹⁸ Unfortunately, we do not know the scale of these charges.

1936-37: SBO indicates that the prices established in mid-December 1935 were still in operation in mid-1936.¹⁹⁹ ARK-38, SOR and STA-38 all show that the Belt III price was in operation up to the end of 1937, and SRT-39 shows that all four belt prices applied up to April 1939.²⁰⁰ On the basis of this it is assumed that the price was unchanged from mid-December to the end of 1937.

Chapman says that no extra cartage charges were levied on this good in 1936.²⁰¹ It is possible that this was also the case in 1937.

Annual average price

1934: The village normal fund price was R 4.05/kilo, including an extra charge of R 0.05/kilo, levied within the 7-30km radius for the defrayment of cartage charges.

The average commercial price was R 14.30/kilo. This was calculated by giving the first belt price of R 13.63/kilo a weight of R 11670.9m and the second belt price of R 16.38/kilo a weight of R 3752.3m (the weights were calculated using the data on rural retail turnover of socialised trade in 1934 presented in Appendix Table D2. The second belt weight was calculated using the turnover of the areas listed for that belt. That for belt one was the turnover of the remaining areas of the USSR). There was no extra charge levied for the defrayment of cartage within the 7-30km radius.

1935: Up to the introduction of unitary prices on 1/10/35 the village normal fund price was R 4.05/kilo, including an extra charge of R 0.05/kilo for the defrayment of cartage charges within the 7-30km radius. A unitary commercial price of R 7.50/kilo operated up to October 1935.

The unitary urban and rural USSR unitary price paid by the peasantry in the last quarter of 1935, using the percentage weights given in section 9, was R 4.90/kilo. No data was available on extra charges levied to defer cartage. The average USSR village price in 1935, was R 4.26/kilo, and the average urban USSR price paid by the peasantry R 6.85/kilo.

1936 and 1937: The prices introduced on 16/12/35 remained in operation throughout these two years. Taking the percentage weights given in section 9 we obtain an average urban and rural USSR unitary price paid by the peasantry of R 4.23/kilo. There was no data available on charges levied to defer cartage.

See Chapter 3 for calculation of the average prices paid in the urban and rural sectors in 1934-37.

12 Herring, ordinary, salted

Normal fund

1934-35: There was insufficient data to enable an approximation of normal fund prices at this time.

Commercial fund

On 10/1/35 the free sale/commercial price of herring, Volga-Caspian and Caspian, ordinary, salted 1st sort (sel'd' V.Kaspiisk. i Kaspiisk., solenaya, ryadovaya, 1 sort), was R 8.00/kilo in Western Oblast, and the price was introduced by Narkomvnutorg Resolution No 77 25/10/34.²⁰² PR-34 confirms that this price list was in operation in the USSR at this time, and TIF indicates that the same price list was in operation in the Georgian SSR at the end of June 1935.²⁰³ No further data on commercial prices was available.

Unitary price

1935-37: Unitary prices for all types of fish were introduced on 1/10/35 and divided into the following five regional belts:²⁰⁴

Belt I: Stalingrad Krai, Azov-Black Sea Krai, Murmansk Okrug, Far Eastern Krai.

Belt II: Karelian ASSR, Northern Krai, Leningrad Oblast (except for the city of Leningrad and Murmansk Okrug), Omsk Oblast, West-Kazakhstan and South-Kazakhstan Oblasts of the Kazakh ASSR, Turkmen SSR, Dagestan ASSR, Crimean ASSR, Azerbaijan SSR.

Belt III: Odessa Oblast, Kuibyshev Krai, Saratov Krai, North Caucasus and Krasnoyarsk Krai, East-Siberian Krai, Yakutsk ASSR.

Belt IV: Moscow City and Moscow Oblast, Leningrad City, Western Oblast, Ivanovo Oblast, Gorkii Krai, Kalinin Oblast, Kirov Krai, Sverdlovsk Oblast, Chelyabinsk Oblast, Tatar ASSR, Orenburg Oblast, Voronezh Oblast, Kursk Oblast, West-SiberianKrai, Ukrainian SSR (excluding Odessa Oblast), Belorussian SSR, Transcaucasian SFSR (excluding Azerbaijan SSR).

Belt V: Bashkir ASSR, Uzbek SSR, Tadzhik SSR, Kirgiz ASSR, Karakalpak ASSR, Kazakh ASSR (excluding West-Kazakhstan and South Kazakhstan Oblasts).

It appears from SBO, and KIR, that the belt prices of Volga-Caspian and Caspian herring, ordinary, salted, first sort (Sel'd' Volgo-kaspiiskaya i Kaspiiskaya, ryadovaya, solenaya, 1 sort), were:²⁰⁵

Belt I - R 5.10/kilo	Belt III - R 5.70/kilo
Belt II - R 5.40/kilo	Belt IV - R 6.00/kilo
Belt V: R 6.60/kilo	

MOS-38 p 21 confirms that the same Belt IV price was in operation in Moscow Oblast in July 1938; so it is assumed that the belt prices did not change during this period.

Average annual price

1934-35: There is insufficient data available to enable average prices for this period to be determined.

1936 and 1937: Taking the following percentage weights calculated for fish goods:

Belts	I	II	III	IV	V
	8.5%	12.0%	14.3%	55.6%	9.6%

(see Appendix Table D2 for the basis of these calculations)

and the belt prices given above, we obtain an average rural USSR price for 1936 and 1937 of R 5.87/kilo. For the urban USSR unitary price paid by the peasantry the following weights were used:

Belts	I	II	III	IV	V
	8.5%	8.8%	14.3%	59.0%	9.6%

These are the same weights as above, except that the weight for Leningrad Oblast has been split between Leningrad city (3.4%), and the oblast itself (0.9%), made on the basis of the breakdown of urban retail turnover in the first quarter of 1935.²⁰⁶ This is made under the assumption that the same expenditure pattern as in the rural sector was also reproduced in the urban sector. Using these weights we get an average urban USSR unitary price of R 5.90/kilo. There were no extra charges for cartage within the 7-30km radius. See Chapter 3 for calculations of the average price paid by the peasantry in both the urban and rural sectors.

13 Pike-perch, fresh and frozen

Normal fund

1934-35: Insufficient data did not enable an approximation of normal fund prices at this time to be made.

Commercial fund

1934-35: On 10/1/35 the free sale/commercial price of large and other types of pike-perch (sudak pylkii, zalom i mernyi, sudak proch. bez bershovnika, sudak bershovnik, 1 sort) was R 6.00/kilo on average in Western Oblast, and the price was established by Narkomvnutorg Resolution No 77 of 25/10/34.²⁰⁷ PR-34 confirms that this price list was in operation in the USSR at this time, and TIF indicates that the same price list was in operation in the Georgian SSR at the end of June 1935.²⁰⁸ There was insufficient data to enable an estimate of commercial prices in this period to be made.

Unitary price

1935-37: On 1/10/35 unitary prices for fish were established, divided into five regional belts; see Section 12. The price of large pike-perch, frozen, first sort (sudak, mernyi, morozhenyi, 1 sort) at this time was (per kilo) R 3.20 in Belt I, R 3.40 in Belt II, R 3.60 in Belt III, R 3.80 in Belt IV, and R 4.20 in Belt V. SBO confirms that the same prices were in operation in the belts listed in July 1936, and MOS-38 confirms that the Belt IV price was still in operation in July 1938, which tends to indicate that prices were stable throughout 1936 and 1937.²⁰⁹

Average annual price

1934-35: There is insufficient data available to enable average prices for this period to be determined.

1936 and 1937: The same percentage weights as those in section 12 applied to pike-perch. Taking the annual belt prices assumed to have been in operation from 1/10/35 and throughout 1936 and 1937, and weighting them with the percentages given earlier, we obtain an average rural USSR unitary price for this period of R 3.71/kilo. For the urban sector price paid by the peasantry the weights listed in section 12 were used. These give an average urban USSR unitary price of R 3.73/kilo. There was no extra charge for cartage added in the 7-30km radius.

See Chapter 3 for calculations of the average prices paid by the peasantry in both the urban and rural sectors.

14 Salt

Hard retail price

1934-35: TSN indicates that from 1/1/33 the following belt prices for salt applied in the 0-30km radius.²¹⁰

Belt I: Donbass R 0.08/kilo

Belt II: Ukraine (without the Donbass), Crimean ASSR, North Caucasus Krai, Belorussian SSR, Western, Ivanovo and Ural'sk Oblasts, Middle and Lower Volga Krai, Dagestan ASSR, and the cities of Moscow and Gorkii R 0.10/kilo

Belt III: Gorkii Krai, without Gorkii city R 0.12/kilo

Belt IV: Bashkir ASSR, ZSFSR, West-Siberian and East-Siberian Krai and Moscow Oblast (excluding Moscow city) R 0.12/kilo

Belt V: Leningrad Oblast, Northern Krai and the Karelian ASSR, Tatar ASSR R 0.12/kilo

Belt VI: Kazakh ASSR, Uzbek SSR, Turkmen SSR, Tadzhik SSR, Kirgiz ASSR, Kara-Kalpak ASSR R 0.14/kilo

Belt VII: Far-Eastern Krai and Yakut ASSR R 0.16/kilo

The handbooks confirm that these prices applied in the listed areas at least up to October 1935.²¹¹ In October 1935 unitary prices for salt were introduced.

Unitary price

1935: Unitary prices divided into seven belts, were established on 4/10/35 for ground salt No 2 and 3 (sol'molotaya No 2, 3).²¹² The belts and prices were as follows:

Belt I: Donets Oblast R 0.08/kilo

Belt II: City of Moscow R 0.11/kilo

Belt III: Ukrainian SSR (without Donets Oblast), Stalingrad Krai, Sverdlovsk Oblast, Chelyabinsk Oblast, Ivanovo Oblast, city of Gorkii R 0.11/kilo

Belt IV: Azov-Black Sea Krai, North Caucasus Krai, Dagestan ASSR, Kuibyshev Krai, Saratov Krai, Belorussian SSR, Western Oblast, Orenburg Oblast, Voronezh Oblast, Crimean ASSR, Kursk Oblast R 0.12/kilo

<u>Belt V:</u>	West-Siberian Krai, East-Siberian Krai, Krasnoyarsk Krai, Omsk Oblast, Northern Krai, Leningrad Oblast, Karelian ASSR, Kalinin Oblast, Moscow Oblast, Bashkir ASSR, Kirov Krai, Tatar ASSR, Gorkii Krai (without the city of Gorkii), ZSFSR	R 0.14/kilo
<u>Belt VI:</u>	Kazakh ASSR, Turkmen SSR, Tadzhik SSR, Uzbek SSR, Kirgiz ASSR, Kara-Kalpak ASSR	R 0.15/kilo
<u>Belt VII:</u>	Far-Eastern Krai	R 0.17/kilo

It is assumed that these prices were in operation for the last quarter of 1935; see section on 1936-37.

It is also assumed that an extra charge for cartage of R 0.05/kilo in the 7-30km radius on average applied. This was calculated as an average of the following extra charges: Sverdlovsk Oblast (Belt III) R 0.03/kilo within a radius up to 40km; West-Siberian Krai (Belt V) R 0.04/kilo within a 7-25km radius; Belorussian SSR (Belt IV) an average of R 0.05/kilo over the 7-30km radius; Western Oblast (Belt IV) an average of R 0.05/kilo over the 7-30km radius;²¹³ and Arkhangel'sk Oblast (Belt V) an average of R 0.04/kilo.²¹⁴

1936-37: SBO shows that the prices established in October 1935 were unchanged in mid-1936.²¹⁵ Chapman, STA-38 and ARK-38 show that the prices established for Belts II, III and V in October 1935 were also in operation up to the end of 1937.²¹⁶ On the basis of this it is assumed that the belt prices established in October 1935 applied for all areas up to the end of 1937. It is assumed that the same average extra charge for cartage given in the section on 1935 also applied in 1936 and 1937.

Average annual price

1934: An average rural USSR price of R 0.10/kilo has been calculated on the following basis, using the data in Appendix Table D2:

Belt I was given a weight of 2.9 per cent (16.5% of the turnover of the Ukrainian SSR, based on the percentage taken by Donetsk Oblast in the first quarter of 1935).²¹⁷

Belt II was given a weight of 38.5 per cent. It was assumed that this belt also included Sverdlovsk Oblast, Chelyabinsk Oblast, Kirov Krai, Kuibyshev Krai, Stalingrad Krai, Saratov Krai and Volga-German Republic, Donetsk Oblast, 16.5 per cent of the weight for the Ukrainian SSR, was excluded (in Belt I).

Belt III was given a weight of 4.0 per cent. This was 62 per cent of the weight for Gorkii Krai and Kirov Krai (calculated on the basis of the percentage breakdown of the rural retail turnover for these krajs in socialised trade in the first quarter of 1935).²¹⁸

Belt IV was given a weight of 22.4 per cent

Belt V was given a weight of 9.1 per cent

Belt VI was given a weight of 9.1 per cent

Belt VII was given a weight of 3.1 per cent

For the urban sector price paid by the peasantry the same weights as above were used, but a weight of 4.9 per cent was allocated to Moscow city in Belt II, and 1.7 per cent to Moscow Oblast in Belt IV. This calculation was made on the basis of urban retail turnover in the first quarter of 1935.²¹⁹ It is assumed that the same expenditure pattern as in the rural sector was reproduced by the peasantry in the urban sector. Thus, we obtain an average urban price paid by the peasantry of R 0.10/kilo.

1935: For the first nine months of 1935 it is assumed that the average prices of R 0.10(rural) and R 0.10/kilo (urban) continued to operate.

The following are the percentage weights attached to the rural belt prices established at the beginning of October 1935:

Belts	I	II	III	IV	V	VI	VII
	2.9%	na	23.2%	25.0%	37.2%	9.1%	2.6%

See Appendix Table D2 for the working underlying this table.

Applying these weights to the belt prices presented above, we obtain an average rural USSR Unitary price of R 0.13/kilo plus R 0.05/kilo extra charge for cartage within the 7-30km radius, giving R 0.18/kilo.

For the urban sector, the same weights as above have been used, except that Moscow city (Belt II) has been given a weight of 4.9 per cent, and Moscow Oblast (Belt V) has been reduced by this amount; see above for explanation. This gives an average urban USSR unitary price of R 0.13/kilo. No extra charge for cartage was levied in the urban sector.

1936-37: The same unitary prices as above, R 0.18/kilo in the village and R 0.13/kilo in the town, held throughout this period.

See Chapter 3 for calculations of the average USSR price paid by the peasantry in both the urban and rural sectors.

15 Tea

Label/Normal fund price

1934-35: The following is the situation with regard to sales of black "baikhovyi" tea (chernyi baikhovyi chai) in the village:

In Western Oblast on 10/1/35 the only teas of this type sold in the village were No 80 at R 23.60/kilo, and No 4 first sort at R 17.60/kilo, the basis for these price quotes was Resolutions of the Committee of Prices attached to the Council of Labour and Defence of 27/1/33, 22/2/33 and 15/1/34.²²⁰ There were no extra cartage charges. The price of tea No 105, which was only sold in the town, was R 18.40/kilo. In Leningrad Oblast on 20/9/33 only teas No 80 and No 4 were sold in the village, and at the same price as above.²²¹ The basis of this price was Circular No 80808 of the Tsentrosoyuz Tea Society 4/9/32, and there was no extra cartage charge. Tea No 105 was sold in the town at the same price as above. The same prices and availabilities of teas also operated in Central Black-Earth Oblast in late August 1933, in West-Siberian Krai in January 1934, in Stalingrad Krai in February, in Gorkii Krai in April and October, Azov-Black Sea and North Caucasus Krai in September-November, and West-Siberian Krai in February 1935.²²²

In the Georgian SSR at the end of June 1935 the only two teas listed as being sold solely in the village were "former No 80" (byvshii No 80) and "former No 4" (byvshii No 4) at the same prices of R 23.60/kilo and R 17.60/kilo respectively.²²³ There were also two other baikhovyi teas, Nos 112 and 115, sold in both town and village at R 20.00/kilo. Once again No 105 was sold only in the town, at R 18.40/kilo. It should be noted that this source does not list the introduction of unitary prices for tea, which happened in late June, even though its prices came into force in late June/early July.

On the basis of the above survey it can be seen that all sources list two baikhovyi teas as being sold exclusively in the village, and in every case but one (the Georgian SSR) these are the only baikhovyi teas sold there. It also appears that the prices of these teas were in operation from late 1932 up to the introduction of unitary prices in late June 1935. Taking an average of the two prices listed, R 23.60 and R 17.60, we obtain R 20.60/kilo, which is slightly above

that for No 105 in the town. Given that these were the only baikhovyi teas sold in the village they have been taken as representative of the baikhovyi group for that sector.

Commercial fund

1934-35: In the Georgian SSR at the end of June 1935 the price of Indian black "baikhovyi" tea No 105, and of "baikhovyi" tea No 1 (chai, chernyi baikhovyi, indiiskii, No 105, chai. chernyi baikhovyi No 1) was R 80.00/kilo. This was a part of the price lists established by Committee of the Commodity Fund Resolution No 119, 7/4/34, and Narkomvnutorg Resolution No 90 4/11/34.²²⁴ STA-34 indicates that from 1/2/34 this price applied to tea No 1.²²⁵ In Western Oblast on 10/1/35 the same price was in operation for tea No 1 listed above, and the basis was the same Committee of the Commodity Fund Resolution.²²⁶ PR-34 also lists the same price for tea No 1,²²⁷ but this only lists resolutions published by October 1934 (the latest is 25th October, it is assumed that the handbook was published in November 1934), which indicates that the price of R 80.00/kilo for tea No 1 was in operation from 1/2/34 at least till the end of June 1935. On the basis of this information it is assumed that the price of R 80.00/kilo for tea No 1 was in operation in the USSR from January 1935 up to the introduction of unitary prices in June of that year. For 1934 the February-December price of R 80.00/kilo has been taken as an approximate indicator of the commercial price of tea in that year. It should be noted that this could distort the price comparison for 1934, but it is thought that any price difference in the first month of that year would not greatly influence the final figure.

Unitary price

1935-37: In late June 1935 a unitary price of R 80.00/kilo was established for black "baikhovyi" Ceylon, Indian, Georgian, and Chinese tea, first sort (chai, chernyi baikhovyi, tseilonsk., indiisk., gruzinsk., kitaisk., 1 sort), in Western Oblast, in line with Narkomvnutorg telegrams No 12614 30/6/35, and No 12684 4/7/35.²²⁸ The same price was charged in Western-Kazakhstan Oblast in November 1935.²²⁹

SBO indicates that in the second half of 1936 the same price was charged in all areas of the USSR, except the Far North, for the same teas.²³⁰ It has been assumed that this was the case from the introduction of unitary prices in June 1935. STA-38, ARK-38 and SOR indicate that the price was left unchanged up to 1938.²³¹

It is assumed that no extra charge for the defrayment of cartage costs was levied, except in remote and mountainous areas.²³²

Annual average price

1934: The label/normal fund price was R 20.60/kilo.

The commercial fund price-R 80.00/kilo.

1935: Up to the introduction of unitary prices in late June the same label/normal fund and commercial fund prices as in 1934, R 20.60 and R 80.00/kilo respectively, were in operation, and there were no extra charges levied for cartage within the 7-30km radius.

In late June a unitary price of R 80.00/kilo was introduced in both urban and rural sectors.

It is possible that tea at the label price listed above may have been sold to the peasants in both the urban and rural sectors. Thus, in calculating the urban price an average of the label and commercial fund prices, R 50.30/kilo, has been taken for the first six months of 1935. The average rural USSR price in 1935 was R 50.30/kilo, and the average urban USSR price paid by the peasantry was R 65.15/kilo.

1936-37: The unitary price of R 80.00/kilo continued to operate throughout the USSR in both of these years. It is assumed that there was no extra charge levied for cartage within the 7-30km radius.

See Chapter 3 for calculations of the average price paid by the peasantry in all sectors.

16 Vodka

Label price

1934-37: In Western Oblast on 10/1/35 the price of wheat vodka (pshenichnaya vodka) was R 5.50/half litre, without the cost of the bottle and the cork, and this price was based on Narkomsnab Resolution No 306 21/6/32.²³³ The general application of this resolution is confirmed by the fact that the same price for the same vodka was quoted by the following sources: NOV-33, STA-34, LEN-34, GK-34, MOS-34, TTR, GOR-34 and NOV-35.²³⁴ According to URA-35 a unitary price of R 6.05/half litre was introduced in May 1935.²³⁵ SBO shows that this price, which was unitary for the USSR (except for the Far North) included the cost of bottle and cork, and that without

these the price of the vodka was R 5.50/half litre.²³⁶ SRT-39
indicates that the price was unchanged up to April 1939.²³⁷ In some
areas another type of vodka - khleboe vino - was sold, at a price of
R 3.75/half litre up to May 1935 and R 4.70/half litre after that
date, but this does not seem to have had widespread distribution.
In line with Chapman's study, wheat vodka has been chosen as
comparable with vodka in 1928.²³⁸ Thus, for 1934-37 the average price
is R 5.50/half litre.

No information on the levying of extra charges for the defrayment of
cartage costs has been discovered in any of the sources for this
period, and it is assumed that no charges were made.²³⁹

Annual average price

1934-37: The average price throughout this period was R 5.50/half
litre in the urban and rural sectors. No extra charge for the defray-
ment of cartage costs within the 7-30km radius has been added.

17 Cigarettes

Label price

1934-37: The price of a packet of 25 cigarettes for the domestic
market, third sort (papirosy vnutrenn. r., 3 sort), in Central Black-
Earth Oblast in late August 1933, was R 0.35.²⁴⁰ This was the hard
label price which applied in both town and village and there was no
extra charge for cartage. The same price was in operation for the
same cigarettes in the areas covered by the following handbooks:
LEN-34, STA-34, GK-34, MOS-34, GOR-34, ROS-34, SMO, TIF, NOV-35,
URA-35, ORT, ARK-38,²⁴¹ indicating that the price held up to 1938.
SMO gives as the basis of its list of cigarette prices Narkomsnab
Resolution No 504 17/12/33, but it would seem that the price list
introduced on this date must have left the price of third sort
unchanged, since the same price was in operation in Central Black
Earth Oblast in late August.²⁴² This is borne out by TIF which gives
as the basis for the price list the same Narkomsnab resolution, and
also Resolution No 432 16/8/32.²⁴³ On the basis of this I assume
that the price was in operation throughout 1933.

The price list for Leningrad Oblast for 20/9/33 presents a slight
problem. The list quotes prices for first, second, fourth and sixth

sort cigarettes while all the other handbooks list higher, first, second, third and fourth sorts. A possible explanation for this is provided by Chapman, who notes that the nomenclature of various sorts of cigarettes was changed in the early 1930s.²⁴⁴ Between March 1930-March 1932 the equivalent of third sort (internal market) was in fact "fourth sort"; from March 1932 - July 1933 it was "third sort, essentially fourth sort"; and from July 1933-January 1935 it was "domestic market third sort". LEN-33 shows that fourth sort (which were the equivalent to third sort, internal market up to March 1932), were R 0.35 per packet of 25, and that the basis for this price list was Resolution of the Committee of the Commodity Fund No 52 9/3/32.²⁴⁵ It is not clear why the old nomenclature should have been applied in this case - unless that of the March 1932 resolution was simply reproduced.

On the basis of the above information, and the fact that the price was a hard label price for town and village, I assume that the price of these cigarettes was constant in 1933-37 at R 0.35 for a packet of 25.

So far no information on the existence of commercial prices for cigarettes has been uncovered. In 1936 special additions for the defrayment of cartage costs in specified remote and mountainous localities were levied.²⁴⁶ No other evidence of the levying of these charges has been uncovered, and since they were fairly small²⁴⁷ and were not widespread, it has been assumed that the prices presented above were representative of those charged.

Average annual price

1934-37: Throughout this period the urban and rural sector label price was R 0.35/packet of 25. No extra charges for cartage have been included. It is possible that some remote areas may have levied such charges, but it is believed that their influence on the all-union price would have been negligible.

It is assumed that there was no commercial trade in cigarettes in this period.

18 Smoking makhorka

Normal fund

1934-35: In Leningrad Oblast on 20/9/33 the label price for 50gms of smoking makhorka (makhorka kuritel'naya) was R 0.25, and the basis of

this was Narkomsnab Resolution No 299 14/6/32.²⁴⁸ In Central Black-Earth Oblast in late August 1933, Stalingrad Oblast in February 1934 Leningrad and Gorkii krai in April, Azov-Black Sea and North Caucasus Krai in September-November, Gorkii Krai in October, Western Oblast on 10/1/35 and the Georgian SSR up to 3/5/35, the label price of the same 60gm pack of makhorka was also R 0.25.²⁴⁹

On the basis of the above data it is assumed that the price of smoking makhorka in all of these areas was R 0.25 per 60gm packet in 1933, 1934 and up to 3/5/35, when a unitary price was introduced. During this period there was no urban/rural differentiation of prices.

Commercial fund

1934-35: SMO says that the commercial price of smoking makhorka (makhorka kuritel'naya) was R 1.00/50gm pack in Western Oblast on 10/1/35, and that the basis of this price was Narkomsnab Resolution No 30 31/1/34.²⁵⁰ The same price was in operation in the Georgian SSR up to 3/5/35 for smoking makhorka;²⁵¹ from this date a unitary price for smoking makhorka replaced the old normal and commercial prices. PR-34 confirms the price of R 1.00 for smoking makhorka, but it gives the weight per packet as 54gms.²⁵² This may be a misprint.

SOT does not give any information on changes in the commercial price of makhorka in 1934, and UZT says that the commercial price of "makhorka" remained unchanged between 1/1/34 and 1/1/35.²⁵³

On the basis of the above data I assume that the commercial price of makhorka was R 1.00/50gm pack throughout 1934 and up to 3/5/35, when unitary prices were introduced.

Unitary price

1935-37: A unitary price of R 0.50/50gm pack for smoking makhorka (makhorka kuritel'naya) was introduced on 3/5/35 by Sovnarkom Resolution No 865 10/5/35.²⁵⁴ It appears that this price applied to the whole of the USSR and was not divided into belts. UZT says that on 1/10/35 and 1/5/36 the unitary price of "makhorka" was 50 per cent of the commercial price prevailing on 1/1/35.²⁵⁵ Since the commercial price was R 1.00/50gm pack (see above) this would confirm that the unitary price of R 0.50 was still in operation at this time. In June 1936 makhorka prices were reduced²⁵⁶ (by Narkomvnutorg Resolution Nos 766 9/6/36 and 774 11/6/36). ORT says that the price of this type of

makhorka was reduced to R 0.35/50gm pack from 11/6/36, and ARK-38 and CHA indicate that this price held throughout 1937.²⁵⁷ Thus the price of smoking makhorka in 1937 was R 0.35/50gm pack, and in 1936 R 0.42. The price was unitary for the USSR, except outlying areas and parts of the Far North where an extra charge of R 0.05/50gm pack was levied.²⁵⁸

Annual average price

1934: The village normal fund price was R 0.25/50gm packet. This does not include any extra charges for the defrayment of cartage within the 7-30km radius.

The urban commercial price throughout 1934 was R 1.00/50gm packet.

1935: Up to the introduction of unitary prices at the beginning of May the village normal fund and urban commercial fund prices were the same as those in 1934 - R 0.25 and R 1.00/50 gm pack respectively. There was no extra charge levied for cartage within the 7-30km radius.

The urban and rural unitary price from the beginning of May to the end of 1935 was R 0.50/50gm pack.

The average rural USSR price for the year was R 0.42/50gm pack, and the average urban USSR price paid by the peasantry was R 0.67/50gm pack.

1936 and 1937: The urban and rural unitary USSR price was R 0.42/50gm pack in 1936, and R 0.35/50gm pack in 1937.

See Chapter 3 for calculations of the average prices paid by the peasantry in 1934-37.

19 Matches, 10 boxes

Unitary price

A unitary price of R 0.03/box (korobka) for town and village was established by Resolution of the Committee of the Commodity Fund attached to the Council of Labour and Defence No 225 26/12/32.²⁵⁹

This price was quoted for town and village in Central Black-Earth Oblast in late August 1933;²⁶⁰ Leningrad Oblast on 20/9/33;²⁶¹ Western Oblast on 10/1/35;²⁶² and the Georgian SSR in July 1935.²⁶³ Other sources quoting this price include: NOV-33, STA-34, LEN-34, MOS-34, NOV-35 and URA-35.²⁶⁴ It appears that this price remained in operation until the end of 1935. On 1st January 1936 the price of a packet

(pachka) of 10 boxes of matches was reduced to R 0.25 by Narkomvnutorg Resolution No 1456 28/12/35, but the retail price of a single box remained the same.²⁶⁵ It is assumed, in line with Chapman, that the next change in price occurred on 1/6/37 when the price of matches per box was reduced from R 0.03 to R 0.02.²⁶⁶ I assume that the price of a packet of 10 boxes was correspondingly reduced to R 0.20* at this time, and that the price remained in operation for the rest of 1937 (as does Chapman).²⁶⁷

On the basis of the above data the following average annual prices have been calculated:

1933-35 - R 0.30/packet of 10
1936 - R 0.25/packet of 10
1937 - R 0.23/packet of 10

The 1937 price differs slightly to the R 0.20 given by Chapman.²⁶⁸

In 1936 extra charges for the defrayment of cartage were levied in specified remote and mountainous localities.²⁶⁹ It appears that these were quite small and affected a relatively small number of people. Since this would not have greatly affected the USSR price as a whole and no information on these charges was presented in the handbooks used in this study, it has been assumed that the prices presented above are representative of those charged in the areas studied.

* I have not assumed that the price of a packet of 10 boxes was reduced by the same percentage as that for one box, because no mention was made in the pricing source of a different price for packs of 10, and there is some evidence to suggest that there were no differential prices before 1936 (since the price of a packet of 10 boxes was reduced to R 0.25 and the full retail price of 10 individual boxes would have been R 0.30 before this anyway). However, if in fact the price of a packet of 10 boxes was reduced by the same percentage then the average annual price would need to be reduced by R 0.03.

Average annual price

1934-37: The following were the average prices of matches in the urban and rural sectors in this period (per packet of 10 boxes):

1934-35 - R 0.30 1936 - R 0.25 1937 - R 0.23

Extra charges for the defrayment of cartage were levied in some remote areas. These have not been included, because it is believed that their influence on the all-union price would have been negligible.

20 Household soap

Normal fund

1934-35: In the Central Black-Earth Oblast in late August 1933 the village price of 40 per cent fat content household soap (khozyaistvennoe mylo, 40% zhirnosti), was R 2.50/kilo, introduced on 1/1/33, and there was no extra cartage charge within a radius of up to 40km of a railway station or wharf.²⁷⁰ The following handbooks also list the same price: NOV-33, LEN-33, GK-34, NKT-34, TSN, GOR-34, ROS-34 and SMO. According to NOV-35 in January/February 1935 the village price of this soap was increased to R 2.80/kilo - the same level as the commercial price.²⁷² In the Georgian SSR at the end of June 1935 there were seven belts for the village price of this soap.²⁷³ However, the Belt 0 price - presumably the price without any extra charges to take into account transport to remote areas etc. - was also R 2.80/kilo. On the basis of this it is assumed that this price was in operation from February to July 1935. Since unitary prices were introduced on 1/9/35, it is also assumed that the price did not change in July and August of that year. This gives average prices of R 2.50/kilo in 1934 and R 2.76/kilo in the first eight months of 1935. The majority of sources do not list extra charges for cartage, so these have not been included.

Commercial price

1934-35: In Moscow Oblast in August 1932 the commercial price of 40 per cent fat content household soap (mylo khozyaistvennoe, 40% zhirnosti) was R 4.00/kilo.²⁷⁴ In Central Black-Earth Oblast in late August 1933 the commercial price of "standard" household soap was R 4.00/kilo.²⁷⁵ SOT-36 says that the commercial price of 40 per cent fat content household soap fell by 25 per cent in 1933.²⁷⁶ In September 1933 the price fell to R 3.00/kilo.²⁷⁷ STA-34 and SMO quote the same commercial price for this soap in January 1934 and 1935.²⁷⁸ In January/February 1935 the commercial price of this soap was reduced to R 2.80/kilo.²⁷⁹ In the Georgian SSR in late June 1935 the commercial price of this soap was divided into seven belts (probably to take into

account the peculiar geographical conditions of that republic).²⁸⁰
The Belt 0 price was also R 2.80/kilo - presumably the base commercial price without any special additions for transport to remote areas. Thus it is assumed that in the rest of the USSR the commercial price of R 2.80/kilo held up to this date. Since unitary prices were introduced on 1/9/35, it is also assumed that this price was unchanged in July and August. Thus the commercial price in 1934 was R 3.00/kilo, and in 1935 (January-September) - R 2.83/kilo.

Unitary price

1935-37: According to ORT (published in August 1936), the following extra charges divided into belts applied to the delivery price of R 2.07/kilo for household soap, 40 per cent fat content (mylo khozyaistvennoe, 40% zhirnosti) in 1936:²⁸¹

Belt I: Moscow, Leningrad, Moscow Oblast, Kalinin Oblast, Leningrad Oblast, Ivanovo Oblast, Western Oblast, Gorkii Krai, Kursk Oblast, Voronezh Oblast, Kirov Krai, Azov-Black Sea, North Caucasus, Kuibyshevsk, Stalingrad and Northern Krai, Sverdlovsk Oblast, Chelyabinsk Oblast, Bashkir ASSR, Crimean ASSR, Karelian ASSR, Belorussian and Ukrainian SSRs, Tatar ASSR, Orenburg Oblast, Saratov Krai
Town - R 0.20/kilo
Village - R 0.23/kilo

Belt II: Omsk Oblast, West-Siberian Krai, ZSFSR, Turkmen SSR, Tadzhik SSR, Kara-Kalpak ASSR, Kirgiz ASSR, Dagestan ASSR
Town - R 0.25/kilo
Village - R 0.30/kilo

Belt III: Krasnoyarsk Krai, Far-Eastern Krai, East-Siberian Krai, Buryat-Mongolian ASSR, Kazakh ASSR, Yakut ASSR, Uzbek SSR
Town - R 0.28/kilo
Village - R 0.33/kilo

It is assumed that these belts applied from the introduction of unitary prices on 1/9/35 to the end of 1937.

The following is the situation with regard to delivery prices and extra trading charges: In Western Oblast (Belt I) on 1/9/35 the unitary delivery price of 40 per cent fat content household soap was R 2.25/kilo and the extra charge in the town - R 0.12, and in the village - R 0.15.²⁸² This gives an urban price of R 2.37/kilo and a village price of R 2.40/kilo. UZT says that the unitary price

of household soap, 40 per cent fat content, remained constant between 1/10/35 and 1/5/36.²⁸³ However, it appears that the extra trading charge for Belt I was changed at the end of February 1936 to R 0.20/kilo for the town and R 0.23/kilo for the village,²⁸⁴ implying that the delivery price must have fallen. Thus it is assumed that the retail price did not change. The next change occurred at the end of May 1936, when the delivery price was reduced to R 2.07/kilo - giving a Belt I retail price of R 2.27/kilo in the town and R 2.30/kilo in the village. STA-38 and ARK-38 indicate that both the Belt I extra trading charges and the unitary delivery prices remained constant from this date to 1938.²⁸⁵ On the basis of the above data it has been calculated that the following Belt I prices applied: September-December 1935 - R 2.37/kilo in the town and R 2.40/kilo in the village; 1936 - R 2.31/kilo in the town and R 2.34/kilo in the village; 1937 - R 2.27/kilo in the town and R 2.30/kilo in the village. The average extra charge for cartage within the 7-30km radius, given by URA-35, KIR-36 and URA-36, and by the source for Western Oblast quoted at the start of this section, is R 0.05/kilo.²⁸⁶

Annual average price

1934: The village normal fund price was R 2.50/kilo. Since the majority of areas do not list extra charges for cartage none have been included.

The commercial price was R 3.00/kilo. There was no extra charge for cartage levied in the 7-30km radius.

1935: The average village normal fund price in the first eight months of 1935, up to the introduction of unitary prices, was R 2.76/kilo. The average urban commercial price in the same period was R 2.83/kilo. In both cases there was no extra charge levied for cartage in the 7-30km radius.

For the last four months of 1935 the unitary prices operating in Belt I, R 2.37/kilo in the town and R 2.40/kilo in the village, have been taken as broadly representative. It is accepted that these will slightly understate the price comparison, but it is believed that, due to the small difference between the extra charges levied in the different price belts and the overwhelming weight attached to Belt I

(73.1% of the total), the understatement will be less than 1 per cent. The average extra charge for cartage in the 7-30km radius was R 0.05/kilo, giving an average rural unitary USSR price of R 2.45/kilo. The average rural USSR price for the year was R 2.66/kilo, and the average urban USSR price paid by the peasantry was R 2.68/kilo (there were no extra charges for cartage in the urban sector).

1936 and 1937: Due to lack of data the Belt I unitary prices have been used. In 1936 the Belt I prices were: urban - R 2.31/kilo, rural - R 2.34/kilo; and in 1937: urban - R 2.27/kilo, rural - R 2.30/kilo. As in the case of the unitary price in 1935, it is believed that the use of the Belt I price as representative of the USSR will lead to an understatement of the price comparison of less than 1 per cent. Finally, the average extra charge for cartage within the 7-30km radius of R 0.05/kilo must be added to the average rural price. This gives an average rural USSR unitary price of R 2.45/kilo in 1936, and R 2.35/kilo in 1937.

See Chapter 3 for calculations of the average prices paid by the peasantry in both the urban and rural sectors in 1934-37.

21 Paraffin

Unitary price

1934-37: According to TTR the unitary price of paraffin was divided into the following two belts at least since August 1933:²⁸⁷

		Town	Village
		(per	litre)
Belt I	Far-Eastern Krai, Eastern and Western Siberia, Kazakhstan, Central Asia	R0.55	R 0.75
Belt II	The remaining republics, krais and oblasts of the USSR	R0.47	R 0.65

An extra charge of R 0.05/litre for the defrayment of the cost of cartage could be added within the 7-30km radius. From an examination of the pricing handbooks it appears that the Belt II village price listed above may be a typographical error. The following handbooks (all included in Belt II), list a price of R 0.66/litre: VOR, LEN-33, GK-34, GOR-34, ROS-34, SMO.²⁸⁸ In the Georgian SSR at the end of June 1935 there were seven belts for the price of paraffin, presumably to take into account the difficult geographical conditions of that republic: the Belt 0 price was also R 0.66/litre in the village.²⁸⁹

ORT says that in the second half of 1936 the following belt prices applied to paraffin:²⁹⁰

		Town	Village (per litre)
Belt I	- Far-Eastern Krai, Eastern and Western Siberia		
	Omsk Oblast, Krasnoyarsk Krai	R 0.55	R 0.75
Belt II	- All remaining regions of the USSR	R 0.47	R 0.68

It also appears that the Belt II village price may be a typographical error, since the prices quoted here are identical with those listed for August 1933, except for this particular price. Also the following handbooks list a price of R 0.66/litre: ROS-36, GOR-36 and ARK-38.²⁹¹

Thus it is assumed that the price of R 0.66/litre held throughout the 1934-37 period. From an assessment of the transport charges listed by a number of the sources available it appears that the R 0.05/litre charge listed by TTR above was applied in the 7-30km radius.

Average annual price

1934: On the basis of the data presented in Appendix Table D2, Belt I was allocated a weight of 20.6 per cent, and Belt II - 79.4 per cent. This gives an average village price of R 0.72/litre including the extra cartage charge of R 0.05/kilo , and the average urban price was R 0.49/litre.

1935-37: The same prices as above operated throughout 1935 and in the first half of 1936. In the second half of 1936, and throughout 1937, the price belts were changed, and the following percentage weights have been allocated to them: Belt I - 12.8 per cent, Belt II - 87.2 per cent. Applying these to the corresponding belt price we obtain an average USSR village price of R 0.72/litre (including the R 0.05/litre extra charge for the defrayment of cartage within the 7-30km radius), and an average USSR urban price of R 0.48/litre. Thus in 1936 the same rural and urban prices as those in 1934-35 prevailed, and in 1937 the prices were R 0.72/litre in the rural sector, and R 0.48/litre in the urban sector.

See Chapter 3 for a calculation of the average price paid by the peasantry in both urban and rural sectors in 1934-37.

Village and commercial fund price

1934-35: Throughout the rationing period (up to April 1935) the village price of thread was "at the commercial level"²⁹² In reality the village price was identical with the commercial price. In January 1934 the commercial price of "Bear", "Globe", "Krasin", "DTD" and "Deer", six strand by 200 yard black and white cotton sewing threads ("Medved'", "Globus", "Krasin", "DTD", "Olen'", khlopchato-bumazhnye shveinye nitki, 6/200 yard), was R 0.55/bobbin, according to NOV-35 and MKO-34.²⁹³ The same price was also charged in February 1934, according to STA-34.²⁹⁴ On 20/3/34 the price of this thread was reduced to R 0.40/200 yards.²⁹⁵ This price is confirmed by GOR-34, PR-34 and SMO.²⁹⁶ In early April 1935 a unitary price for thread was introduced. ETI indicates no fall in the average commercial price of thread up to this time, so it is assumed that the commercial price quoted above held from January 1935 to April.²⁹⁷ Given that the commercial and village prices were identical we get the following average prices: 1934 - R 0.43/200 yards; 1935 - R 0.40/200 yards. No extra cartage charge applied in the 7-30km radius.

Unitary price

1935-37: A single unitary price was introduced for six-strand black and white mat or glazed thread (nitki 6-ti slozhenii, matovye i appretirovannye, belye i chernye) of R 0.41/ 200 yards on 10/4/35 by Narkomvnutorg Resolution No 236; and this price was in operation in the Georgian SSR at the end of June 1935.²⁹⁸ The same price was also quoted by ORT and ARK-38, indicating that the price held throughout 1936 and 1937.²⁹⁹ There was no urban/rural price differential and extra charges for the defrayment of cartage in the 7-30km radius did not apply.

Annual average price

1934: The village and commercial price was R 0.43/200 yards.
 1935: The village and commercial price for the first three months was R 0.40/200 yards. The unitary price for the rest of the year was R 0.41/200 yards. This gives an annual average price of R 0.41/200 yards. The same price was paid by the peasantry in both urban and rural USSR trade. There was no extra charge for cartage in the 7-30km radius.

1936, 1937: The same unitary price of R 0.41/200 yards held in both urban and rural sectors of the USSR throughout this period.

23 Calico No 6

Village and commercial fund price

1934-36: Commercial prices were charged for cotton cloth sold in the village throughout the period covered by this section. In February 1934 the village and commercial price of printed calico, cloth No 06a, group No 1-5, width 60.5cms (sitets nabivnoi, No standartov 06a, No krapov 1-5, 60.5sm), was R 1.94/metre, on average, in Stalingrad Krai,³⁰⁰ and the basis for this price was Narkomsnab Resolution No 345 of 21/8/33.³⁰¹ It appears that cloth No 6a had a similar price to this, since for most of 1933 - up to August - the price of this cloth was R 1.90/metre.³⁰² Unfortunately, we do not have a price for this cloth in the first half of 1934, so the price of cloth 06a has been used as representative of both. ROS-34 says that a new commercial price list was introduced on 21/8/34. The average price of cloth Nos 06a and 6a was R 1.93/metre, and the same price list was quoted by GOR-34 in October 1934, PR-34 at the end of that year, and NOV-35 in February 1935.³⁰³ It is assumed that the next change occurred on 1/7/35, when the average price of cloth No 06a was increased to R 2.35/metre.³⁰⁴ MOS-35 indicates that this price was definitely in operation in November 1935. It has also been assumed that it held up to the end of March 1936, when unitary delivery prices were introduced.

Taking the price of R 1.94/metre for the first seven and a half months of 1934, and R 1.93/metre for the remaining four and a half months, we obtain an average price of R 1.94/metre for that year. For 1935 we take R 1.93/metre for the first six months and R 2.35/metre for the remaining six, this gives an average price for 1935 of R 2.14/metre. For the first three months of 1936 we take the price of R 2.35/metre.

Unitary price

1936-37: On 1/4/36 a unitary delivery price list together with geographical belts for extra trading charges for printed calico, cloth No 06a, 6a, group Nos 1-5, width 60-62cms (sitets nabivnoi, No tkanei 06a, 6a, No krapov 1-5, 60-62sm), was introduced.³⁰⁵ The belts were as follows:

	Town	Village
Belt I - Moscow, Leningrad	2.9%	-
Belt II - Moscow Oblast, Kalinin, Leningrad, Ivanovo, Western, Kursk and Voronezh Oblasts, Gorkii and Kirov Krai (without Udmurt ASSR), Belorussian SSR	4.0%	7.0%
Belt III - Azov-Black Sea Krai, North Caucasus, Kuibyshev, Saratov, Stalingrad and Northern Krai, Sverdlovsk Oblast, Orenburg and Chelyabinsk Oblasts, Bashkir ASSR, Tatar ASSR, Crimean ASSR, Ukrainian SSR	4.2%	7.4%
Belt IV - Karelian ASSR, Udmurt ASSR, Omsk Oblast, West-Siberian Krai, ZSFSR, Uzbek SSR, Turkmen SSR, Kara-Kalpak ASSR, Kirgiz ASSR	5.2%	9.3%
Belt V - Krasnoyarsk Krai, Far-Eastern Krai, East Siberian Krai, Buryat-Mongolian ASSR, Yakut ASSR, Dagestan ASSR, Kazakh ASSR, Tadzhik SSR	6.2%	12.4%

Taking the average delivery price of R 2.11/metre for these cloths at this time we get the following retail prices (per metre):
 Belt I - town R 2.17; Belt II - town R 2.19, village R 2.26;
 Belt III - town R 2.20, village R 2.27; Belt IV - town R 2.22, village R 2.31; Belt V - town R 2.24, village R 2.37. It appears that this price remained in operation for the rest of 1936 and up to 1/6/37. On the latter date the price of calico in all general stores (v obshchei torgovoi seti) was reduced by 10 per cent.³⁰⁶ There was no other price change in 1937. This gives the following average prices for 1937 (per metre): Belt I - town R 2.04; Belt II - town R 2.06, village R 2.13; Belt III - town R 2.07, village R 2.14; Belt IV - town R 2.09, village R 2.18; Belt V - town R 2.11, village R 2.23. There was no extra charge for cartage in the 7-30km radius in this period.

Note: CHA pp 192, 244-45 quotes an average price of cloth Nos 06a, 6a, 6b, group No 5, of R 3.65/metre in 1936 and R 3.43/metre in 1937. This difference in price cannot be explained by the inclusion of cloth 6b (since this cloth had almost the same price as those for 06a and 6a), nor by any additional price falls. Furthermore, the following sources quote the lower prices for cotton cloth: KIR-36, URA-36, ROS-37, UFA-37, ARK-38.³⁰⁷ ORT gives an explanation for this difference.³⁰⁸
 From 25/7/36 special price lists for cotton cloth were introduced in

Moscow, Leningrad, Kiev and Minsk. It appears that these prices were much higher than those in operation in the rest of the USSR.

Unfortunately, this seems to have been overlooked by Chapman in calculating average USSR prices. Thus, taking the Belt I Moscow price of R 3.15/metre, in 1936 for "calico", Chapman calculated the USSR price on the basis of this as R 3.23/metre.³⁰⁹ This introduces a significant overestimate into Chapman's calculations, compounded by the fact that special price lists were also introduced on this date for woollen cloth, footwear, and galoshes, and these prices were used in calculating USSR prices in 1936.³¹⁰

Annual average price

1934: The commercial and village price for the first seven and a half months of this year was R 1.94/metre, and R 1.93/metre for the remaining four and a half, giving an annual average price of R 1.94/metre. This applied to purchases made by the peasantry in both the urban and rural sectors. There was no extra charge for cartage in the 7-30km radius.

1935: The price in the first six months was R 1.93/metre, and in the last six months R 2.35/metre, giving an annual average price of R 2.14/metre. This applied in both urban and rural sectors (as in 1934).

1936: The village and commercial price in the three months of 1936 was R 2.35/metre.

The following are the percentage weights, attached to the belt prices given earlier, in the calculation of the average belt prices:

Belts	I	II	III	IV	V
Rural	-	29.9%	42.1%	16.7%	11.3%
Urban	8.3%	21.6%	42.1%	16.7%	11.3%

See Appendix Table D2 for the calculation of these weights. Taking the belt prices given earlier, and weighting them with the above percentages, we obtain an average rural USSR unitary price of R 2.29/metre, and an average urban USSR unitary price of R 2.20/metre. This price was in operation for the last nine months of 1936. Combining these prices with the commercial prices in operation for the first three months of 1936, we get an average urban USSR price paid by the peasantry in 1936 of R 2.24/metre. However, the urban price in Moscow,

Leningrad, Kiev and Minsk was R 3.65/metre in 1936 and R 3.43/metre in 1937. Assuming that this differential was maintained from the introduction of these higher prices from the end of July 1936, they must be integrated into our calculations. Thus, we must first take the unadjusted urban USSR unitary price paid by the peasantry, R 2.24/metre, and adjust this in line with the higher prices prevailing in Moscow, Leningrad, Kiev and Minsk in the last five months of 1935. As a rough estimate, we shall take the combined weight of these areas in spending in the urban sector by the peasantry as 13 per cent. This is based on the following calculation: the combined weight of Moscow and Leningrad was taken as 8.3 per cent - see Appendix Table D2 notes to col. 10, for a description of the working underlying this - the city of Kiev was assumed to have a weight of 3.2 per cent - the percentage of rural turnover of the Ukrainian SSR in the first quarter of 1935 accounted for by Kiev Oblast³¹¹ - and half of the weight for Belorussian SSR, 1.5 per cent, was ascribed to Minsk. The weights for Belts III and II were correspondingly reduced by 3.2 per cent and 1.5 per cent. It is accepted that this method leaves much to be desired, but in the absence of regional data on peasant spending in the urban sector it is the best alternative. Thus, we obtain an average adjusted urban USSR price paid by the peasantry of R 2.32/metre. There was no extra charge levied for cartage in the 7-30km radius.

1937: Taking the average unitary prices for Belts II-V given earlier and weighting these by the percentage weights presented above, we obtain an average rural USSR unitary retail price of R 2.15/metre, and an average urban USSR retail price paid by the peasantry of R 2.07/metre. The price of this cloth in 1937 was R 3.43/metre in Moscow, Leningrad, Kiev and Minsk. Thus, adjusting our price using the weight of 13 per cent of rural turnover and applying this for the whole of 1937, we obtain an adjusted urban USSR unitary retail price paid by the peasantry of R 2.25/metre. There was no extra charge for cartage levied in the 7-30km radius.

See Chapter 3 for a calculation of the average price paid by the peasantry in the urban and rural sectors in 1934-37.

24 Coarse calico No 40

Village and commercial fund price

1934-36: The village and commercial price of coarse calico, bleached, No 40a, 61 cms wide (byaz' otbel'naya, No 40-a, 61sm), was R 2.05/metre in the price list established on 21/8/33.³¹² This price list was also quoted for Stalingrad Krai in February 1934.³¹³ The next change in the commercial and village price occurred on 21/8/34 when the price was increased to R 2.10/metre.³¹⁴ The same price was also quoted by GOR-34 in October 1934, PR-34 in November/December 1934 and NOV-35 in February 1935.³¹⁵ It is assumed that the next change occurred on 1/7/35, when the price of this cloth was increased to R 2.60/metre.³¹⁶ The latter source also indicates that this price was in operation in November 1935. It has been assumed that it held up to the end of March 1936, when a new unitary delivery price was introduced.

Unitary price

1936-37: On 1/4/36 a unitary delivery price for coarse calico, ordinary dye and print, No 40a, 61-63 cms (byaz' otbel'naya, obyknovennoe krashenie i nabivka, No 40a, 61-63sm), was R 2.37/metre.³¹⁷ The same extra charges divided into regional belts as those listed in section 23 applied. This gives the following retail prices: Belt I - town R 2.44; Belt II - town R 2.47, village R 2.54; Belt III - town R 2.47, village R 2.55; Belt IV - town R 2.49, village R 2.59; Belt V - town R 2.52, village 2.66. It appears that these prices remained in operation for the rest of 1936 and up to the end of May 1937. On 1/6/37 the price of coarse calico in general stores was reduced by 5 per cent.³¹⁸ This gives the following annual average prices for 1937: Belt I - town R 2.37; Belt II - town R 2.40, village 2.46; Belt III - town R 2.40 village R 2.47; Belt IV - town R 2.42, village R 2.51; Belt V - town R 2.44, village R 2.58. No extra charges for cartage in the 7-30km radius applied during this period.

Annual average price

1934: Taking the price of R 2.05/metre for the first seven and a half months of 1934, and R 2.10/metre for the remaining four and a half, we obtain an annual average price of R 2.07/metre for village and commercial trade. There was no extra charge for cartage levied in the 7-30km radius.

1935: Taking R 2.10/metre for the first six months and R 2.60/metre for the last six, the annual average village and commercial trade price was R 2.35/metre.

1936: In the first three months the village and commercial price of R 2.60/metre was in operation.

Taking the percentage weights presented in section 23, and applying these to the unitary prices introduced from 1/4/36, we obtain an average rural USSR unitary price of R 2.57/metre, and an average unitary urban USSR price paid by the peasantry of R 2.48/metre.

As in the case of calico No 6 (section 23), special increased prices were introduced in Moscow, Leningrad, Kiev and Minsk at the end of July 1936. According to LEN-36 the price of coarse calico No 40, was R 3.50/metre - approximately 41 per cent above the average urban unitary price given above.³¹⁹ Taking the same weights for Moscow Oblast, Leningrad Oblast, Kiev Oblast and Belorussian SSR as those given in section 23, and noting that these special increased prices were in operation for the last five months of 1936, we obtain an adjusted average urban unitary price of R 2.55/metre for the last nine months of 1936. The average rural retail price for the whole of 1936 was R 2.58/metre, and the average adjusted urban USSR unitary retail price paid by the peasantry was R 2.56/metre. There was no extra charge for cartage in the 7-30km radius.

1937: The average unitary prices paid by the peasantry, and weighted by the percentages given in section 23, were R 2.49/metre in the rural sector, and R 2.41/metre in the urban sector. The latter price has now to be adjusted to take into account the special increased prices introduced in Moscow, Leningrad, Kiev and Minsk in July 1936. It is calculated that the special increased price in 1937 was R 3.40/metre, taking into account the 5 per cent reduction in coarse calico prices at the end of June 1937. Taking the weight of 13 per cent of rural retail turnover for the oblasts and the republic covered by these areas - see section 23 - we obtain an average adjusted annual USSR retail price paid by the peasantry in urban trade in 1937 of R 2.54/metre.

There was no extra charge levied for cartage in the 7-30km radius.

See Chapter 3 for calculations of the average price paid by the peasantry in both urban and rural trade in 1934-37.

25 Moleskin

Village and commercial fund price

1934-36: The village and commercial price of moleskin, plain coloured, dark, No 220a, 61cms wide (moleskin, glad. krash., cher. tsvet., No 220a, 61sm), was R 2.70/metre from 21/8/33.³²⁰ The price list applied in Stalingrad Krai in February 1934.³²¹ The next change in the commercial and village price of this cloth occurred on 21/8/34, when the price was increased to R 2.95/metre.³²² The same price was quoted by GOR-34, PR-34 in late 1934 (possibly November/December of that year), and NOV-35 in February 1935.³²³ It is assumed that the next change occurred on 1/7/35, when the price was increased to R 3.50/metre.³²⁴ The latter source indicates that this price was in operation in November 1935. It has been assumed that it held up to the introduction of unitary delivery prices in late March 1936.

Unitary price

1936-37: On 1/4/36 a unitary delivery price for moleskin, plain coloured, ordinary dye and print, No 220a, 61-63cms wide (moleskin, gl. krash., obyknovennoe krashenie i nabivka, No 220a, 61-63sm), of R 3.49/metre was introduced.³²⁵ The same extra charges, divided into regional belts listed in section 23, applied. This gives the following retail prices (per metre): Belt I - town R 3.59. Belt II - town R 3.63, village R 3.73; Belt III - town R 3.64, village R 3.75; Belt IV - town R 3.67, village R 3.82; Belt V - town R 3.71, village R 3.92. There was no change in moleskin prices in the price change of June 1937.³²⁶ It is assumed that these prices held from April 1936 to the end of 1937. No extra charges for cartage were levied in the 7-30km radius during this period.

Annual average price

1934: Taking the price of R 2.70/metre for the first seven and a half months, and R 2.95/metre for the remaining four and a half, the annual average village and commercial trade price was R 2.79/metre.

1935: Taking R 2.95/metre for the first six months, and R 3.23/metre

for the remaining six, the annual average village and commercial trade price was R 3.23/metre.

1936: In the first three months the village and commercial trade price was R 3.50/metre. Taking the percentage weights presented in section 23, and applying these to the unitary prices given above, we obtain an average rural USSR unitary price of R 3.75/metre, and an average unadjusted urban USSR unitary price paid by the peasantry of R 3.65/metre. As in the case of calico No 6, special increased prices were introduced in Moscow, Leningrad, Kiev and Minsk at the end of July 1936. According to LEN-36 the price of this moleskin was R 5.00/metre - 37 per cent above the average urban USSR price paid by the peasantry.³²⁷ Taking the same weights for Moscow, Leningrad, Kiev and Minsk calculated in section 23 (13.0%), and noting that these prices were in operation for the last five months of 1936, we obtain an adjusted urban USSR unitary price paid by the peasantry in 1936 of R 3.75/metre. The average USSR rural price paid in 1936 (including commercial prices in the first quarter of the year) was R 3.69/metre, and the average USSR urban price paid by the peasantry (including commercial prices) was R 3.69/metre. There were no extra charges levied to defray cartage in the 7-30km radius.

1937: The same unitary rural USSR price as in the last nine months of 1936, R 3.75/metre, held throughout 1937. The average urban USSR price paid by the peasantry was R 3.83/metre. There was no extra charge levied for cartage in the 7-30km radius.

See Chapter 3 for calculation of the average price paid by the peasantry in both urban and rural sectors in 1934-37.

26 Woollen cloth

Village and commercial fund price

1934-35: The price of woollen cloth, fine fabrics, broadcloth, cotton warp A, 133cm (sukno-sherstyanye tkani, tonko-sukonnye tkani, sukno, b/o A 133sm) in Gorkii Krai in October 1934 was R 21.00/metre, there was no extra charge for cartage within the 7-30km radius, and the basis of this price was Narkomsnab Resolution No 355, 20/6/32,³²⁸ Whilst the same cloth is not listed in the pricing handbook for Azov-Black Sea and North Caucasus Krai for September-November 1934, those which are the same as the cloths listed for Gorkii Krai have identical prices.³²⁹

On the basis of this it is assumed that the price listed for Gorkii Krai was standard for the village in 1933 and 1934 (assuming that the price was not changed in December 1934). PR-34 gives the same commercial price for the same cloth in operation in the USSR in November 1934, and NOV-35 gives the same commercial price in February 1935.³³⁰ It is assumed that this price held up to the introduction of unitary prices in late June 1935. There were no extra charges for cartage levied within the 7-30km radius throughout this period.

Unitary price

1935-37: ORT indicates that on 13/7/35 the following extra charges differentiated by regional belts, applied to the delivery price of woollen cloth.³³¹

		Town	Village
Belt I	- Moscow, and Leningrad	4.0%	-
Belt II	- Moscow, Kalinin, Leningrad, Ivanovo, Western Kursk and Voronezh Oblasts, Gorkii Krai, Kirov Krai (minus Udmurt ASSR), Belorussian SSR, Karelian ASSR	5.0%	6.0%
Belt III	- Azov-Black Sea, North Caucasus, Kuibyshev, Saratov, Stalingrad and Northern Krai, Sverdlovsk, Orenburg and Chelyabinsk Oblasts, Bashkir, Tatar and Crimean ASSRs, Ukrainian SSR, Udmurt ASSR	6.0%	7.0%
Belt IV	- ZSFSR, Uzbek SSR, Turkmen SSR, Kara-Kalpak and Kirgiz ASSR, West-Siberian Krai, Omsk Oblast	7.0%	8.5%
Belt V	- Krasnoyarsk Krai, Far-Eastern Krai, East-Siberian Krai, Yakut, Buryat-Mongolian, Dagestan and Kazakh ASSRs, Tadzhik SSR	8.0%	9.5%

The delivery price of woollen cloth, broadcloth, cotton warp A, black, dark blue, brown, 136cm, Mossukno (sherstyan. tkani, sukno b/o A, chernyi, sinii, korichnevyi, 136sm, Mossukno), was R 40.00/ metre at this time. This gives the following retail prices: Belt I - R 41.60; Belt II - town R 42.00, village R 42.40; Belt III - town R 42.40, village R 42.80; Belt IV - town R 42.80, village R 43.40; Belt V - town R 43.20, village R 43.80. It has been assumed that these prices came into operation on 1/7/35. URA-36, ROS-37 and

ARK-38 indicate that these prices remained in operation throughout 1936 and 1937.³³² SBP confirms that this type of cloth was not included in the price reduction of June 1937.³³³ There was no extra charge levied for cartage in the 7-30km radius throughout this period.

Annual average price

1934: The village and commercial trade price was R 21.00/metre.

1935: Up to the introduction of unitary prices in late June it is assumed that the village and commercial trade price of R 21.00/metre was in operation.

The following are the weights attached to the unitary belt prices introduced in late June:

Belts	I	II	III	IV	V
Rural	-	30.5%	42.6%	15.6%	11.3%
Urban	8.3%	22.2%	42.6%	15.6%	11.3%

See Appendix Table D2 for the calculation of these weights.

Taking the belt prices given earlier, and weighting them with the above percentages, we obtain an average rural USSR unitary price for the second half of 1936 of R 42.89/metre, and an average urban USSR unitary price paid by the peasantry of R 42.40/metre. Thus, the average urban USSR price paid by the peasantry in 1935 was R 31.70/metre, and the average rural USSR price was R 31.95/metre. There was no extra charge for cartage in the 7-30km radius.

1936-37: The same rural USSR unitary price as that for the second half of 1935, R 42.89/metre, was in operation throughout 1936-37. The average urban USSR unitary price paid by the peasantry in the second half of 1935, R 42.40/metre, was also in operation up to the end of July 1936. At that time, however, special increased prices were introduced in Moscow, Leningrad, Kiev and Minsk; see section 23. From CHA it appears that the price of this woollen cloth in these cities was R 45.00/metre - 6.1 per cent above the average urban USSR unitary price given above.³³⁴ This must be integrated into urban price calculations. Taking the weight of 13 per cent given for these cities in section 23, and noting that this price operated in these areas for the last five months of 1936 and throughout 1937, we obtain an average

adjusted urban USSR unitary price for 1936 of R 42.58/metre. The average adjusted urban USSR unitary price was R 42.82/metre in 1937. There were no extra charges for cartage levied in the 7-30km radius.

See Chapter 3 for calculations of the average prices paid by the peasantry in both urban and rural trade in 1934-37.

27 Cotton socks, men's

Village and commercial fund price

1934-35: In Azov-Black Sea and North Caucasus Krai in September-November 1934 the village and commercial price of men's socks, low, size 10-12, article nos 64, 65, 66, 67, 1st sort (noski muzhsk., np, razmer 10-12, artikul 64, 65, 66, 67, 1 sort) was R 2.28/pair.³³⁵

The same price for the same men's socks was also in operation in Gorkii Krai in October 1934 and the basis for the price is given as Narkomsnab Resolution No 127 25/6/34.³³⁶ In both cases there was no extra cartage charge within a radius of 40km of a railway station or wharf. PR-34 confirms that in November 1934 the commercial price of men's socks, low, cotton No 24/2 or 24, size 25-29, article nos 64, 65, 66, 67, 1st sort (noski muzhsk., n/p, kh/b 24/2 24, razmer 25-29, artikul 64, 65, 66, 67, 1 sort) was R 2.28/pair on average.³³⁷ According to SOT-36 the commercial price of knitwear fell by 1.7 per cent on average in 1934 - ie it was almost stable.³³⁸ Given such a small overall change it has been assumed that the price observed for June-November 1934 was in operation throughout the year. This may lead to a slight understatement of the price comparison since some commercial prices at this time were rising. NOV-35 indicates that these commercial prices were still in operation in February 1935.³³⁹ It is assumed that this price list remained in operation up to August 1935 when unitary prices were introduced. SOT-35 gives some support to this, since it gives an average 12.6 per cent fall in the free sale price of knitwear between 1/1/35 and 1/10/35, and the average urban price chosen in the section on unitary prices was R 1.93/pair and the village price - R 1.88/pair in October 1935 (15.3% and 17.5% below the rural and urban commercial price respectively).³⁴⁰

Unitary price

1935-37: On 25/8/35 unitary prices for knitwear were introduced.³⁴¹ The following extra charges, divided into regional belts, were levied on socks and stockings:

	Town	Village
Belt I - Moscow, Leningrad	6.5%	-
Belt II - Moscow, Kalinin, Leningrad, Ivanovo, Western, Kursk and Voronezh Oblasts, Gorkii Krai, Kirov Krai (minus Udmurt ASSR) Belorussian SSR	7.0%	10.0%
Belt III - Azov-Black Sea, North Caucasus, Kuibyshev, Saratov, Stalingrad and Northern Krai, Sverdlovsk, Orenburg, Chelyabinsk Oblasts, Bashkir ASSR, Tatar ASSR, Crimean ASSR, Ukrainian SSR, Karelian ASSR, Udmurt ASSR	8.0%	11.0%
Belt IV - Omsk Oblast, West-Siberian Krai, ZSFSR, Uzbek SSR, Turkmen SSR, Kara-Kalpak ASSR, Kirgiz ASSR	11.0%	13.0%
Belt V - Krasnoyarsk, Far-Eastern and East- Siberian Krai, Buryat-Mongolian ASSR Yakut ASSR, Dagestan ASSR, Kazakh ASSR Tadzhik SSR	12.0%	14.0%

Taking the average delivery price of R 1.73/pair for gents' socks, articles 61 and 65, plain, cotton/cotton No 24/2 (noski muzhsk., art 61, 65, gladk. khl. bum./khl. bum. No 24/2), and gents' socks, articles 64 and 66, cotton No 24 (noski muzhsk., art 64, 66, khl. bum. 24), and applying the extra charges listed above, we get the following retail prices (per pair): Belt I - town R 1.84; Belt II - town R 1.85, village R 1.90; Belt III - town R 1.87, village R 1.92; Belt IV - town R 1.92, village R 1.96; Belt V - town R 1.94, village R 1.97. It is believed that these prices remained in operation up to 1/7/37, when the price of men's socks in general stores was reduced by 8 per cent.³⁴²

It is also assumed that no other changes in prices were introduced in 1937. Support is given to this assumption by CHA, ROS-37 and ARK-38.³⁴³ On the basis of these assumptions the annual average prices in 1937 are as follows (price per pair): Belt I - town R 1.77; Belt II - town R 1.78, village R 1.83; Belt III - town R 1.80, village R 1.85; Belt IV - town R 1.85, village R 1.88; Belt V - town R 1.87, village R 1.89.

No extra charges for cartage were levied in the 7-30km radius during this period.

Annual average price

1934: The village and commercial trade price was R 2.28/pair. No extra charge for cartage was levied within the 7-30km radius.

1935: It is believed that the village and commercial trade price of R 2.28/pair was in operation up to the end of August.

The following are the percentage weights, attached to the belt prices introduced at the end of August 1935 and given earlier, and used in the calculation of the average belt prices:

Belts	I	II	III	IV	V
Rural	-	29.9%	43.2%	15.6%	11.3%
Urban	8.3%	21.6%	43.2%	15.6%	11.3%

See Appendix Table D2 for the calculation of these weights.

Taking the belt prices given earlier, and weighting them with the above percentages we obtain an average rural USSR unitary price for the last four months of 1935 of R 1.93/metre, and an average urban USSR unitary price of R 1.88/metre. Combined with the village/commercial price given above this gives us an average rural USSR price in 1935 of R 2.16/metre, and an average urban USSR price paid by the peasantry of R 2.15/metre. There was no extra charge levied for cartage within the 7-30km radius.

1936: In 1936 the same unitary price as in the last four months of 1935 continued to operate. There were no extra charges levied for cartage in the 7-30km radius.

1937: Taking the belt prices given above for 1937, and weighting them with the percentage weights presented earlier, we obtain an average rural USSR unitary price of R 1.85/metre, and an average urban USSR unitary price paid by the peasantry of R 1.81/metre. There were no extra charges levied for cartage within the 7-30km radius.

See Chapter 3 for calculations of the average prices paid by the peasantry in both urban and rural trade in 1934-37.

28 Galoshes, men's

Village and urban price

1934-37: The commercial and village price for first sort men's low galoshes, Article No 109-110 (galoshi, melkie, art. 109-110, 1 sort)

in Central Black-Earth Oblast in late August 1933, was R 15.00/pair, there was no extra cartage charge within a 7-30km radius, and the basis for the price was Committee of the Commodity Fund Resolution No 224 26/12/32.³⁴⁴ The same village price for the same galoshes, based on the same Committee of the Commodity Fund Resolution, was also quoted in NOV-33, LEN-33, STA-34, GK-34, ROS-34, GOR-34, NOV-35, URA-35, SMO and ORT.³⁴⁵ In the Georgian SSR the pricing structure for this good at the end of June 1935 was slightly more complicated. The price was divided into five belts ranging from R 15.00/pair in Belt 0/1 to R 15.55/pair in Belt 5.³⁴⁶ Presumably this structure was established to take into account the peculiarities of the geography of the republic. It shows however that R 15.00/pair was also the basis of the price in this area as well. On 1/6/37 the price of the same type and sort of galoshes for the whole of the USSR was reduced to R 13.80/pair;³⁴⁷ this is confirmed by ROS-37 and ARK-38.³⁴⁸ According to SBP the price of men's galoshes in general stores (v obshchei torgovoi seti) was to be reduced by 8 per cent on 1/6/37, giving a price of R 15.00/pair before the price change.³⁴⁹ Thus, the average village price in 1937 is R 14.30/pair.

Chapman gives the Moscow and USSR prices of these galoshes as R 22/pair in 1936, and R 20.08/pair in Moscow in 1937.³⁵⁰ This large discrepancy is explained by the introduction of special prices for footwear in Moscow, Leningrad, Kiev and Minsk on 25/7/36.³⁵¹ Most certainly there is no evidence that these prices were charged at any time in the other areas covered by this survey. Again, as in the case of cotton and woollen goods, this will introduce a significant over-estimate of the price comparison in Chapman's study.

Annual average price

1934, 1935: The village and commercial price was R 15.00/pair. There was no extra charge levied for cartage within the 7-30km radius. 1936, 1937: The average village price was R 15.00/pair in 1936. In 1937 the village price was R 15.00/pair for the first five months and R 13.80/pair for the remaining seven. This gives an average village price for the year of R 14.30/pair. For the urban sector, account must be taken of the special increased prices introduced in July 1936.

We take the weight for Moscow, Leningrad, Kiev and Minsk given in section 23, 13 per cent, and the remaining weight for the rest of the USSR urban sector, 87 per cent, and apply the prices in 1936 of R 22.00/ pair and R 15.00/pair respectively, and noting that the higher price was in operation for the last five months of 1936, we obtain an average urban USSR price paid by the peasantry in 1936 of R 15.38/ pair. For 1937, we take the same weights and the average prices of R 20.08/ pair and R 14.30/pair, and noting that the higher price was in operation throughout the year we obtain an average urban USSR paid by the peasantry of R 15.05/pair. There were no extra charges for cartage within the 7-30km radius.

See Chapter 3 for calculations of the average price paid by the peasantry in both urban and rural sectors.

29 Boots, men's, black

Village and commercial fund price

1934-36: The village and commercial price of men's boots, screwed, sewn and wooden-pegged soles, split vamp, overlaid counter, laced, hard toe, false welt, textile lining, chrome or young calf, black chrome-calf, calf, glace horse (horse skin), article 75, 76, 77, 1st sort (botinki, muzhsk., vintovaya, proshivnaya i derevyanno-shpil'kovaya, otrezn. soyuzka, nakladn. zadnik, na shnurkakh, zhestk. nosok, fal'sh. rant., tekstil'naya podkladka, iz khrom. polukozhan. ili vyrostka, chernogo khroma-opoika, rosshevro [kon khrom.], Art. 75, 76, 77, 1 sort) in Azov-Black Sea and North Caucasus Krai in September-November 1934 was R 27.67/pair on average and there was no extra charge for cartage within the 7-30km radius.³⁵² The same average price was also charged in Gorkii Krai in October 1934.³⁵³ UFA-33a, NOV-33, KHA and NOV-35 confirm that this average price applied throughout 1934 and at least up to February 1935.³⁵⁴

Unitary price

1936-37: On 1/4/36 unitary delivery prices, and extra trading charges divided into regional belts, were introduced for footwear.³⁵⁵ The following belts applied:

	Town	Village
Belt I - Moscow, Leningrad	4.2%	-
Belt II - Moscow Oblast, Kalinin Oblast, Ukrainian SSR, Belorussian SSR, Leningrad Oblast,		

	Town	Village
Ivanovo Oblast, Azov-Black Sea Krai, North Caucasus Krai	6.2%	9.4%
Belt III - Kursk Oblast, Voronezh Oblast, Western Oblast, Gorkii Krai	6.9%	10.4%
Belt IV - Kirov Krai, Tatar ASSR, Crimean ASSR, Karelian ASSR, Northern Krai, Kuibyshev Krai, Saratov Krai, Stalingrad Krai, Sverdlovsk Oblast, Chelyabinsk Oblast, Orenburg Oblast, West-Siberian Krai, ZSFSR, Bashkir ASSR, Omsk Oblast	7.5%	11.3%
Belt V - Uzbek SSR (excluding Khorezms, Kashka- Dar'ins and Surkhan-Dar'ins Okrugs, transferred to Belt VI in late July 1936), Turkmen SSR, Tadzhik SSR, Kirgiz ASSR, Kara-Kalpak ASSR	8.4%	12.8%
Belt VI - Far-Eastern Krai, East Siberian Krai, Krasnoyarsk Krai, Kazakh ASSR, Yakut ASSR, Buryat-Mongolian ASSR, Dagestan ASSR	9.2%	14.6%

According to NOV-36,³⁵⁶ the unitary delivery prices of black boots, split vamp, laced, hard toe, overlaid counter, textile lining and leather uppers of young calf, horse or dog, calf, kid, screwed or pegged leather soles, Article 2000CH.V., 2000CH.D., 2000CH.O., 2000CH.SH. (botinki chernye, otrezn. soyuzka, na shnurkakh, zhestkii nosok, nakladnoi zadnik, tekstil'naya podkladka, bertsy kozhanye iz vyrostka, rosshevro ili dogshevro, opoika, shevro, vintov. i derevyan. shpilechnye, art. 2000CH.V., 2000CH.D., 2000CH.O., 2000CH.SH.) were as follows:

young calf (art. 2000CH.V.) R 42.00/pair
horse or dog (art. 2000CH.D.) R 42.00/pair
calf (art. 2000CH.O.) R 43.50/pair
kid (art. 2000CH.SH.) R 48.00/pair

The average of these prices was R 43.88/pair. Applying the extra charges listed we get the following average retail prices: Belt I - town R 45.72; Belt II - town R 46.60, village R 48.01; Belt III - town R 46.91, village R 48.44; Belt IV - town R 47.17, village R 48.84; Belt V - town R 47.57, village R 49.50; Belt VI - town R 47.92, village R 50.29. These prices remained in operation up to 1/6/37, when the price of standard footwear with leather soles was reduced by 5 per cent in general trading outlets.³⁵⁷ This gives the following average prices for 1937: Belt I - town R 44.38; Belt II -

R 45.24, village R 46.61; Belt III - town R 45.55, village R 47.03; Belt IV - town R 45.79, village R 47.42; Belt V - town R 46.18, village R 48.06; Belt VI - town R 46.52, village R 48.83. UFA-37 and ROS-37 confirm that the reduced prices that these averages include were in operation in the second half of 1937.³⁵⁸ There were no extra charges for cartage levied within the 7-30km radius.

CHA gives a price of R 100.00/pair in 1936 and R 97.08/pair on average for the same type of boot in Moscow in 1937.³⁵⁹ It appears that the reason for this large discrepancy is the introduction of special prices, separate to those listed for 1/4/36, which were introduced on 25/7/36 in Moscow, Leningrad, Kiev and Minsk.³⁶⁰

Annual average price

1934: It is assumed that the village and commercial trade price was R 27.67/pair. There was no extra charge for cartage within the 7-30km radius.

1935: It is believed that the 1934 village price applied up to the end of February. There is no further data for the rest of this year

1936: The following are the weights attached to the belt prices in operation from 1/4/36:

Belts	I	II	III	IV	V	VI
Rural	-	39.7%	12.2%	31.6%	6.0%	10.5%
Urban	8.3%	31.4%	12.2%	31.6%	6.0%	10.5%

See Appendix Table D2 for the calculation of these weights.

Taking the belt prices given earlier and weighting them with the above percentages, we obtain an average rural USSR unitary price for the last nine months of 1936 of R 48.65/pair, and an average urban USSR unitary price paid by the peasantry of R 46.94/pair. However, the urban price in Moscow, Leningrad, Kiev and Minsk, for the same pair of boots, was R 100.00/pair from late July 1936. Assuming that this practice continued in 1936 (and 1937) it is necessary to adjust our price data to accommodate this. Taking the calculated weight for sales in these cities - 13% of peasant purchases in the urban sector, see section 23 - and applying this to the higher price, which operated for five of the last nine months of 1936, we obtain an adjusted urban USSR unitary price paid by the peasantry of R 50.84/pair. There were no extra charges for cartage within the 7-30km radius.

1937: Taking the average unitary prices for 1937 and weighting them with the same table of percentages as presented above, we obtain an average rural USSR unitary price of R 47.35/pair, and an average urban USSR unitary price paid by the peasantry of R 45.57/pair. Adjusting the latter figure in line with the increased prices in Moscow, Leningrad, Kiev and Minsk, of R 97.08/pair, and using the same weight for these cities (13%), we obtain an adjusted urban USSR price paid by the peasantry of R 52.38/pair. There were no extra charges for cartage within the 7-30km radius.

See Chapter 3 for calculations of the annual average price paid by the peasantry in both the urban and rural sectors.

30 Boots, ladies'

Village and commercial fund price

1934-37: In Azov-Black Sea and North Caucasus Krai in September-November 1934 the village and commercial price of ladies' boots, welted, sewn welted, staple welted, split vamp, laced, hard toe, cloth lining, of black chrome young calf, calf, horseskin, dogskin, sheepskin, kid, Articles 176, 177, 178, 179, 1 sort (zhenskiye botinki, rantovye, ranteproshivnye, rantoskobochnye, otrezn. soyuzka, na shnurkakh, zhestk. nosok, tekst. podkladka, iz chernogo khrom. vyrostka, opoika, rosshevro, dogshevro, shevreta, ili shevro, art. 176, 177, 178, 179, 1 sort) was R 30.00/pair on average, and there was no extra charge for cartage within the 7-30km radius.³⁶¹ The same village price for the same good was charged in Gorkii Krai in October 1934, and the basis for this price was Narkomsnab Resolution No 241, 19/5/32.³⁶² UFA-33a, NOV-33, KHA, and NOV-35 indicate that this price was in operation throughout 1934 and at least up to the end of February 1935.³⁶³ Data on the period March 1935-March 1936 (when unitary prices were introduced) is not available at present.

Unitary price

1936-37: On 1/4/36 a unitary price for ladies' boots, split vamp, laced, hard toed, overlaid counter, textile lining, black leather upper, welted, on leather sole, young calf, horseskin or dogskin, calf, kid (zhenskie botinki, otreznaya soyuzka, na shnurkakh, zhestkii nosok, nakladnoi zadnik, tekstil'naya, podkladka, bertsy kozhanye, chernye, rantovye, na kozhanoi podoshve, iz vyrostka,

rosshevro ili dogshevro, opoika, shevro), of R 40.25/pair on average, was introduced throughout the USSR.³⁶⁴ Applying the extra charges listed in section 29 to this delivery price we obtain the following retail prices (per pair): Belt I - town R 41.94; Belt II town R 42.75, village R 44.03; Belt III - town R 43.03, village R 44.44; Belt IV - town R 43.27, village R 44.80; Belt V - town R 43.63, village R 45.40; Belt VI - town R 43.95, village R 46.13. These prices remained in operation for the rest of 1936 and up to 1/6/37, when the price of standard footwear with leather soles and sold in general trading outlets was reduced by 5 per cent.³⁶⁵ This gives the following annual average unitary prices (per pair) for these boots in 1937: Belt I - town R 40.72; Belt II - town R 41.50, village R 42.75; Belt III - town R 41.78, village R 43.15; Belt IV - town R 42.01, village R 43.49; Belt V - town R 42.36, village R 44.08; Belt VI - town R 42.67, village R 44.78. UFA-37 and ROS-37 confirm that the price was stable up to June 1937.³⁶⁶

See section on annual average price for information on special increased prices introduced in Moscow, Leningrad, Kiev and Minsk in 1936.

There was no extra charge for cartage in the 7-30km radius during this period.

Annual average price

1934: The village and commercial price was R 30.00/pair. There was no extra charge levied for cartage in the 7-30km radius.

1935: It is believed that the 1934 village price applied up to the end of February. There is no further data for the rest of this year

1936: Taking the percentage weights presented in section 19, and applying these to the unitary prices introduced on 1/4/36 we obtain an average rural USSR unitary price for the last nine months of 1936 of R 44.63/pair, and an average urban USSR price paid by the peasantry of R 43.06/pair. As in the case of gents' boots, special increased prices for ladies' boots were charged in Moscow, Leningrad, Kiev and Minsk in the last five months of 1936 and throughout 1937.

Unfortunately, we do not have data on the special prices charged for these particular boots. However, taking the average mark-up for the three other types of leather footwear of 5.4 per cent - the difference between the unadjusted and adjusted urban USSR prices paid by the peasantry in 1936 - and applying this to our unadjusted urban price above, we obtain an adjusted urban USSR unitary price paid by the peasantry of R 45.39/pair. There were no extra charges levied for cartage.

1937: Taking the belt prices for 1937, and weighting these with the percentages presented in section 29, we obtain an average rural USSR unitary price of R 43.33/pair, and an average urban USSR unitary price paid by the peasantry of R 42.41/pair. The latter price, however, needs to be adjusted to take into account the special increased prices prevailing in Moscow, Leningrad, Kiev and Minsk in 1937. Taking the average mark-up for the three other types of leather footwear in this study of 9.7 per cent - the difference between the unadjusted and adjusted urban USSR prices paid by the peasantry in 1937 - and applying this to our unadjusted urban USSR price above, we obtain an adjusted urban USSR price paid by the peasantry in 1937 of R 46.52/pair. There were no extra charges levied for cartage within the 7-30km radius.

See Chapter 3 for calculations of the average prices paid by the peasantry in both the urban and rural sectors in 1934-37.

31 Ladies' oxfords

Village and commercial fund price

1934-35: In Azov-Black Sea and North Caucasus Krai in September-November 1934 the village and commercial price of ladies' oxfords, welted, sewn welted, staple welted, split vamp, laced, hard toe, leather lining, of black chrome young calf, calf, horse, dog, sheep, kid, Articles 186, 187, 188, 189, 1st sort (zhenskiye polubotinki, rantovye, rantoproshivnye, rantoskobochnye, otrezn.soyuzka, na shnurkakh, zhestk. nosok, kozh. podkladka, iz chernogo khrom.vyrostka, opoika, rosshevro, dogshevro, shevreta, shevro, art 186, 187, 188, 189, 1 sort), was R 27.75/pair on average, and there was no extra charge for cartage within the 7-30km radius.³⁶⁷ The same average village price was charged for the same shoes in Gorkii Krai in October 1934, and the basis for this price was Narkomsnab Resolution No 241, 19/5/32.³⁶⁸ UFA-33a, and NOV-33 and NOV-35 confirm that this price was in operation throughout 1934 and at least up to February 1935.³⁶⁹

Unitary price

1936-37: On 1/4/36 a unitary price for ladies' oxfords, black, split vamp, with or without overlaid counter, hard toe, laced, with leather lining in part of the counter, welted, on leather sole, of young calf horse or dog, calf, kid (zhenskie polubotinki, chernye, otreznaya soyuzka, s nakladnym ili bez nakladnogo zadnika, zhestkii nosok, na shnurkakh s kozhanoi podkladkoi v chasti zadnika, rantovye, na

kozhanoi podoshve, iz vyrostka, rosshevro ili dogshevro, opoika, shevro), of R 38.25/pair on average was introduced throughout the USSR.³⁷⁰ Extra charges, divided into regional belts, were applied to this price; see section 29. These give the following retail prices (per pair): Belt I - town R 39.86; Belt II - town R 40.62, village R 41.85; Belt III - town R 40.89, village R 42.23; Belt IV - town R 41.12, village R 42.57; Belt V - town R 41.46, village R 43.15; Belt VI - town R 41.77, village R 43.84. As indicated by UFA-37, ROS-37 and the pricing bulletins, these prices held up to 1/6/37, when the price of standard footwear with leather soles and sold in general trading outlets was reduced by 5 per cent.³⁷¹ This gives the following average retail prices in 1937 (per pair): Belt I - town R 38.70; Belt II - town R 39.44, village R 40.63; Belt III - town R 39.70, village R 41.00; Belt IV - town R 40.55, village R 42.56. There were no extra charges for cartage in the 7-30km radius in this period.

Chapman quotes a Moscow price for the same shoe in 1936 of R 65.00/pair and in 1937 of R 63.10/pair.³⁷² The reason for this large difference in prices is the introduction of special prices for footwear in Moscow, Leningrad, Kiev and Minsk in late July 1936.³⁷³

Average annual price

1934: The village and commercial price was R 27.75/pair. There was no extra charge levied for cartage within the 7-30km radius.

1935: The 1934 village price was in operation at least up to the end of February. There is no further data on the rest of the year.

1936: Taking the percentage weights presented in section 29, and applying these to the belt prices introduced on 1/4/36, we obtain an average rural USSR unitary price for the last nine months of 1936 of R 42.41/pair, and an average urban USSR price paid by the peasantry of R 40.92/pair. As in the case of all of the other types of footwear included in this study, there were also special increased prices introduced at the end of July 1936 in Moscow, Leningrad, Kiev and Minsk. These must be integrated into our study. Taking the weight of 13 per cent of rural expenditure which we assumed in section 23 to have been made in these cities, and the special increased price of R 65.00/pair assumed to be in operation in all of these cities

and noting that the increased prices operated from the end of July 1936 and throughout 1937, we obtain an adjusted average urban USSR price paid by the peasantry in the last nine months of 1936 of R 42.71/pair. There were no extra charges for cartage within the 7-30km radius.

1937: Taking the belt prices for 1937, and weighting these with the percentages presented in section 29, we obtain an average rural USSR unitary price of R 41.18/pair, and an average urban USSR unitary price paid by the peasantry of R 39.73/pair. Adjusting the latter price in line with the special increased price of R 63.10/pair operating in Moscow, Leningrad, Kiev and Minsk, and weighting this by 13 per cent (see section 23), we obtain an adjusted average urban USSR unitary price paid by the peasantry in 1937 of R 42.86/pair. There were no extra charges levied for cartage within the 7-30km radius.

See Chapter 3 for calculations of the average prices paid by the peasantry in both the urban and rural sectors in 1934-37.

32 Children's oxfords

Village and commercial fund price

1934-35: In Azov-Black Sea and North Caucasus Krai in September-November 1934 the average village/commercial price of children's oxford shoes, and shoes screwed, sewn or wooden-pegged soles, split vamp, laced, hard toe, cloth lining, of black chrome or sheep, Article No 127, 1st sort (detskiye polubotinki i tufli, vintovaya, proshivnaya i derevyanno-shpil'kovaya, otrezn.soyuzka, na shnurkakh, zhestk. nosok, tekst. podkladka, iz chernogo khroma ili shevreta, art 127, 1 sort) was R 12.00/pair, and there was no extra cartage charge within the 7-30km radius. The same village price for the same shoes was also charged in Gorkii Krai in October 1934, and the basis of this price was Narkomsnab Resolution No 241, 19/5/32.³⁷⁴ UFA-33a, NOV-33, KHA and NOV-35 confirm that this price was in operation throughout 1934 and at least up to February 1935.³⁷⁵

Unitary price

1936-37: On 1/4/36 a unitary price for children's oxfords, laced, split vamp, hard toe, leather lining in part of the counter, black, screwed or sewn leather soles, calf, horse or dogskin, young calf, kid (detskie polubotinki, na shnurkakh, otreznaya soyuzka, zhestkii nosok, kozhanaya podkladka v chasti zadnika, chernye, vintovye ili

proshivnye na kozhanoi podoshve, iz vyrostka, rosshevro ili dogshevro, opoika, shevro), of R 15.75/pair on average was introduced throughout the USSR.³⁷⁶ Extra charges, divided into regional belts, were applied to this delivery price; see section 2.9. The retail prices charged for these boots, on the basis of the unitary price and extra charges, were as follows (per pair): Belt I - town R 16.41; Belt II - town R 16.73, village R 17.23; Belt III - town R 16.84, village R 17.39; Belt IV - town R 16.93, village R 17.53; Belt V - town R 17.07, village - R 17.77; Belt VI - town R 17.20, village R 18.05. As indicated by UFA-37 and ROS-37 the prices of these shoes were reduced by 5 per cent on 1/6/37.³⁷⁷ This was the only price change during this period. This gives the following average retail prices for 1937 (price per pair): Belt I - town R 15.93; Belt II - town R 16.24, village R 16.73; Belt III - town R 16.35, village R 16.88; Belt IV - town R 16.43, village R 17.02; Belt V - town R 16.57, village R 17.25; Belt VI - town R 16.70, village R 17.53.

There was no extra charge for cartage levied within the 7-30km radius throughout this period.

Chapman quotes a Moscow price for the same shoes of R 25.00/pair in 1936, and R 23.83 pair in 1937.³⁷⁸ This large difference in price is explained by the introduction of special footwear in Moscow, Leningrad, Kiev and Minsk in late July 1936.³⁷⁹

Annual average price

1934: The village and commercial price was R 12.00/pair. There was no extra charge levied for cartage within the 7-30km radius.

1935: The 1934 village price was in operation at least up to the end of February. There is no further data on the remainder of the year.

1936: No data has been uncovered on commercial prices in the first three months of 1936.

Taking the percentage weights presented in section 29, and applying these to the belt prices introduced for these shoes in 1/4/36, we obtain an average rural USSR unitary price for the last nine months of 1936 of R 17.46/pair, and an average urban USSR price paid by the peasantry of R 16.85/pair. At the end of July special increased prices of R 25.00/pair, were introduced in Moscow, Leningrad, Kiev and Minsk. Adjusting our urban price to take this into account, and

weighting the increased price by 13 per cent, the percentage of rural purchases calculated to have been made in the urban sector (see section 23), we obtain an adjusted urban USSR unitary price paid by the peasantry in the last nine months of 1936 of R 17.46/pair. There were no extra charges for cartage levied in the 7-30km radius.

1937: Taking the average unitary prices given earlier, and weighting them by the percentages given in section 29, we obtain an average rural USSR unitary price of R 16.96/pair, and an average urban USSR price paid by the peasantry of R 16.36/pair. Adjusting the price to take into account the special increased price of R 23.83/pair operating in 1937, and using the same eight of 13 per cent as above, we obtain an average adjusted urban USSR price paid by the peasantry of R 17.37/pair. There were no extra charges for cartage in the 7-30km radius.

See Chapter 3 for calculations of the average prices paid by the peasantry in both the urban and rural sectors.

FOOTNOTES

- 1 See TIN pp 5-14.
- 2 G Levin, A Belov and B Bukin, "Izdershki obrashcheniya v sisteme potrebkkooperatsii i gostorgovli [po otchetnym dannym za 1933g.]", Sovetskaya Torgovlya No 2-3, 1935, p 52, and N Rauzov, "Osnovnye itogi po izdershki obrashcheniya za 1935g." Sovetskaya Torgovlya No 9, 1936, pp 36-39.
- 3 VOR p 241.
- 4 LEN-33 p 35.
- 5 UFA-33b pp 8-9.
- 6 STA-34 p 10.
- 7 GK-34 pp 34-35.
- 8 NOV-33 p 23.
- 9 ROS-34 p 23.
- 10 MOS-34 p 13.
- 11 GOR-34 p 77.
- 12 DRZ pp 48-55.
- 13 SMO pp 56-57.
- 14 Torgovo-informatsionnyi byulleten' Zapoblottedelvnutorga No 10, 25/4/35 p 4.
- 15 TIF pp 36-37.
- 16 SPT No 15 10/7/35 p 8.
- 17 ETI p 101.
- 18 SZR No 51, 13/10/35, pp 750-51.
- 19 JC-50 p 12.
- 20 SBO p 28.
- 21 STA-38 p 74, SOR p 12, ARK-38 p10.
- 22 SBO pp 9-10.
- 23 VOR p 241.
- 24 LEN-33 p 35.
- 25 NOV-33 p 23.
- 26 UFA-33b pp 8-9.
- 27 STA-34 p 10.
- 28 GK-34 pp 34-35.
- 29 ROS-34 p 23.
- 30 MOS-34 p 13.

- 31 GOR-34 p 77.
- 32 SMO pp 56-57.
- 33 Torgovo-informatsionnyi byulleten' Zapoblotdelvnutorga,
op. cit. p4.
- 34 TIF pp 36-37.
- 35 SPT No 15, 10/7/35, p 8.
- 36 SZR No 51, 13/10/35, pp 750-51.
- 37 SBO p 28.
- 38 STA-38 p 74, SOR p 12, ARK-38 p 10.
- 39 EPS p 156, MOS-33 p 39.
- 40 LEN-33 p 35, VOR p 42, UFA-33b p 9.
- 41 NOV-33 p 23 STA-34 p 10, LEN-34 p 18 and GK-34 pp 36-37.
- 42 TTR p 55, MOS-34 p 14.
- 43 ROS-34 p 23, GOR-34 p 78.
- 44 This assumption is supported by EPS p 156, which says that
the price of rye bread was increased from R 0.25 to R 0.50
in that year.
- 45 STA-34 p 10.
- 46 GOR-34 p 138.
- 47 SOT-36 p 156 KOL p 15 indicates that rye bread prices remained
at between 60.4 per cent - 60.8 per cent of their March 1933
levels throughout 1934.
- 48 DRZ pp 48-69.
- 49 Taken from DRZ p 69.
- 50 Taken from SZR No 51, 13/10/35, pp 750-51.
- 51 SBO p 43.
- 52 STA-38 p 87, SOR pp 15-18, ARK-38 p 16.
- 53 MOS-33 p 39, UFA-33b p 9, VOR p 42, LEN-33 p 35.
- 54 LEN-34 p 18, GK-34 pp 36-37.
- 55 TTR p 55, MOS-34 p 14.
- 56 ROS-34 p 23, GOR-34 p 78.
- 57 GOR-34 p 138.
- 58 SOT-36 p 156.
- 59 KOL p 15.
- 60 EPS p 156.
- 61 DRZ pp 48-69.

- 62 DRZ p 69.
- 63 SZR No 51, 13/10/35, pp 750-751.
- 64 SBO p 43.
- 65 STA-38 pp 15-18, ARK-38 p 16.
- 66 LEN-33 p 36.
- 67 VOR p 43.
- 68 UFA-33b.
- 69 NOV-33 p 24, STA-34 p 10, LEN-34 p 19, GK-34 pp 36-37, MOS-34 p 14, GOR-34 pp 79-80.
- 70 STA-34 p 10.
- 71 GOR-34 p 138.
- 72 TSN, No 4, 15/6/34 p 9, PR-34 p 142.
- 73 DRZ pp 48-69.
- 74 SMO pp 60-61.
- 75 TIF-35 p 43.
- 76 BVN No 11, 1935, pp 11-12.
- 77 SZR No 51, 13/10/35, p 752.
- 78 TIF p 228.
- 79 SZR No 51, 13/10/35, p 752.
- 80 SBO p 26, STA-38 p 73, SOR p 13, ARK-38 p 11.
- 81 LEN-33 p 36.
- 82 VOR p 43.
- 83 UFA-33b p 10.
- 84 NOV-33 p 24, STA-34 p 10.
- 85 LEN-34 p 19.
- 86 MOS-34 pp p 14.
- 87 GOR-34 pp 79-80.
- 88 ROS-34 pp 24-25.
- 89 STA-34 p 10.
- 90 TSN No 4, 15/6/34.
- 91 GOR-34 p 138, PR-34 p 142.
- 92 DRZ pp 48-69.
- 93 SMO pp 60-61.
- 94 TIF p 43.
- 95 SZR No 51, 13/10/35 p 752, BVN No 11 1935, p 11.

- 96 SBO p 26.
- 97 STA-38 p 73, SOR p 13, ARK-38 p 11.
- 98 STA-34 pp 11-12.
- 99 NOV-33 p 28, LEN-34 p 20, GK-34 pp 38-41, MOS-34 p 16, TTR p 57, GOR-34, p 80.
- 100 ROS-34 p 24.
- 101 GOR-34 p 80, TTR p 57, ROS-34 p 24, LEN-33 p 37.
- 102 GOR-34 p 138.
- 103 PR-34 p 142.
- 104 KOL p 15.
- 105 STA-34 pp 11-12.
- 106 DRZ pp 48-69.
- 107 SMO pp 60-61.
- 108 SPT No 11-12 25/5/35 p 20.
- 109 SZR No 51, 13/10/35 p 753.
- 110 SBO p 26.
- 111 STA-38 p 73, SOR p 14, ARK-38 p 13.
- 112 CHA p 222.
- 113 VOR p 48.
- 114 LEN-33 p 45.
- 115 CHA p 222.
- 116 VOR p 48.
- 117 GOR-34 p 83.
- 118 ROS-34 p 33.
- 119 GOR-34 p 83.
- 120 MOS-34 p 24, LEN-34 p 21, GK-34 pp 34-35.
- 121 SMO pp 64-5.
- 122 TIF p 84.
- 123 SPR No 2-3 25/10/35 pp 23-4.
- 124 VOR p 49.
- 125 SMO-35 p 65.
- 126 TIF p 85.
- 127 Malyshev, 1936, op.cit. p 119.
- 128 SPR No 2-3, 25/10/35, pp 23-24, SBO pp 468-69.

- 129 CHA p 222.
- 130 SPR No 14, July 1936, pp 16-18.
- 131 SBO pp 68-69, ARK-38 p 106, SOR p 33, STA-38 p 183.
- 132 JC-50 p 12.
- 133 SMO pp 66-67.
- 134 VOR p 36.
- 135 GOR-34 p 84.
- 136 ROS-34 p 26.
- 137 SIB-35 p 75.
- 138 TTR p 74.
- 139 LEN-33 pp 43-44.
- 140 STA-34 p 18.
- 141 LEN-34 p 24.
- 142 GK-34 pp 34-35.
- 143 MOS-34 p 66.
- 144 LEN-33 pp 43-44.
- 145 TIF p 86.
- 146 SMO pp 66 -67.
- 147 PR-34 p 142.
- 148 MAL p 192.
- 149 LEN-33 pp 43-44.
- 150 ETI p 97.
- 151 GOR-34 p 84, SMO pp 66-67.
- 152 SMO pp 66-67, PR-34 p 142.
- 153 URA-35 p 45.
- 154 SPR No 2-3 25/10/35 p 21.
- 155 LEN-33 p 43.
- 156 SZR 13/10/35 No 51, p 755.
- 157 See Clark, Soviet Economic Facts, McMillan 1972, pp 116-121.
- 158 SBO p 474, STA-38 p 176, ARK-38 p 116, SOR pp 35-37, SRT-39 p 168.
- 159 CHA pp 191, 223-24.
- 160 CHA p 89.
- 161 VOR p 34.
- 162 LEN-33 p 38.

163 GK-34 pp 30-31, GOR-34 p 82 .
164 ROS pp 26-27 .
165 SMO p 67 .
166 URA-35 p 34 .
167 TIF pp 48-9 .
168 VOR p 36 .
169 UZI p 108 .
170 SOT-36 p 156 .
171 TIF p 68 .
172 GOR-34 p 140 .
173 PR-34 p 143 .
174 URA-35 p 35 .
175 SMO p 68 .
176 SPR No 2-3, 25/10/35, pp 3-4 and SBO pp 138-39 .
177 SPR No 7-8, Dec 1935, p 3 .
178 JC-50 p 12 .
179 See SPR No 1, 2/10/35, p4 .
180 SBO p 139 .
181 ARK-38 p 25, SOR p 26, STA-38 p 95, SRT-39 p 80 .
182 JC-50 p12 .
183 VOR p 34 .
184 LEN-33 p 38 .
185 GK-34 pp 30-31, GOR-34 p 82 .
186 ROS-34 pp 26-7 .
187 SMO-35 p 67 .
188 URA-35 p 34 .
189 TIF pp 48-9 .
190 VOR p 36 .
191 UZI p 108 .
192 GOR-34 p 140, TIF p 50 .
193 SOT-36 p 156 .
194 PR-34 p 143 .
195 URA-35 p 35, SMO -35 p 68 .
196 SPR No 2-3, 25/10/35, pp 3-4 .
197 SPR No 7-8, Dec 1935, p 3 .
198 see SPR No 1, 2/10/35, p4 .
199 SBO p 139 .
200 ARK-38 p 25, SOR p 26, STA-38 p 95, SRT-39 p 80 .
201 JC-50 p 12 .

- 202 SMO pp 76-90 .
- 203 PR-34 pp 163-69, TIF pp 77-83 .
- 204 SZR 13/10/35 No 51, pp 754-55 .
- 205 SBO pp 334-35, KIR pp 124-25 .
- 206 SOV-35 pp 46-47.
- 207 SMO pp 76-90 .
- 208 PR-34 pp 163-69, TIF pp 77-83 .
- 209 SBO p 314, MOS-38 p 3 .
- 210 TSN pp 70-71.
- 211 VOR p 32, LEN-33 p 43, STA-34 p 37, MOS-34 p 17, ROS-34 p 27, LEN-34 pp 25-26, NOV-35 p 75, SMO-35 p 68, and URA-35 p 37.
- 212 SPR No 4, 10/11/35, pp 19-20 .
- 213 SPR No 7-8, December 1935, pp 21-22 .
- 214 ARK-38 pp 37-38 .
- 215 SBO pp 238-43 .
- 216 CHA pp 240-41, STA-38 p 97, ARK-38 p 37.
- 217 SOV-35 p 46.
- 218 loc. cit.
- 219 SOV-35 pp 46-47.
- 220 SMO p 69.
- 221 LEN-33 p 30 .
- 222 VOR pp 20-21, NOV-33 p 29, STA-34 p 18, GK-34 pp 32-33, GOR-34 p 51, ROS-34 p 28, NOV-35 p 76.
- 223 TIF p 28.
- 224 TIF p 29.
- 225 STA-34 p 152 .
- 226 SMO p 69.
- 227 PR-34 p 142 .
- 228 SPT No 16 25/7/35 p 6 .
- 229 URA-35 pp 35-36 .
- 230 SBO p 149 .
- 231 STA-38 pp 96-97, ARK-38 p 122, SOR p 28 .
- 232 JC-50 pp 12, 29 .
- 233 SMO p 112 .
- 234 SIB-33 p 31, STA-34 p 35, LEN-34 pp 16-17, GK-34 p 28, MOS-34 p 65, TTR p 62, GOR-34 p 53, NOV-35 p 129.
- 235 URA-35 p 45.
- 236 SBO p 243 .
- 237 SRT-39 p 252 .
- 238 CHA pp 89, 242-43 .

- 239 JC-50 p 13 says that there was no information on the levying of any extra cartage charges in 1936.
- 240 VOR pp 18-19.
- 241 STA-34 p 39, LEN-34 p 17, GK-34 p 27, MOS-34 p 67, GOR-34 p 51, ROS-34 p 193, SMO p 53, TIF p 26, NOV-35 p 128, URA-35 p 60, ORT p 161 and ARK-38 p 166.
- 242 SMO p 53.
- 243 TIF p 26.
- 244 CHA pp 299-300, LEN-33 p 29.
- 245 TNI-33 p 29.
- 246 JC-50 pp 13, 15.
- 247 JC-50 p 29.
- 248 LEN-33 p 29.
- 249 VOR pp 18-19, STA-34 p 39, LEN-34 p 18, GK-34 p 27, ROS-34 p 193, GOR-34 p 51, SMO p 53, TIF pp 26-227.
- 250 SMO p 53.
- 251 TIF pp 26, 227.
- 252 PR-34 p 142.
- 253 SOT-36 p 156, UZI p 108.
- 254 TIF p 227.
- 255 UZI p 108.
- 256 SPR No 15, Aug 1936.
- 257 ORT p 162, ARK-38 p 159, CHA p 302.
- 258 ORT p 162.
- 259 TIF p 28.
- 260 VOR pp 18-19.
- 261 LEN-33 p 29.
- 262 SMO p 48.
- 263 TIF p 28.
- 264 NOV-33 p 32, STA-34 p 39, LEN-34 p 18, MOS-34 p 67, NOV-35 p 130, URA-35 p 61.
- 265 SPR No 2, Jan 1936.
- 266 CHA pp 198-99.
- 267 CHA p 298.
- 268 CHA p 195.
- 269 JC-50 pp 13, 15, 29.
- 270 VOR pp 68-69.
- 271 NOV-33 p 38, LEN-33 p 80, GK-34 pp 42-43, NKT-34 p 77, TSN No 1 15/4/34 p 3, GOR-34 pp 130-31, ROS-34 p 188, SMO p 31.
- 272 NOV-35 p 347.

- 273 TIF p 162.
- 274 SRT-32 p 124.
- 275 VOR p 69.
- 276 SOT-36 p 156.
- 277 TSN No 1 15/4/33 p 3.
- 278 STA-34 pp 39-40, SMO p31.
- 279 NOV-35 p 347.
- 280 TIF p 162.
- 281 ORT pp 163-64.
- 282 Torgovo-informatsionnyi byulleten' Zapoblottedelvnutorga No 19, 10/9/35, p 2.
- 283 UZT p 108.
- 284 KIR p 369, ORT p 163.
- 285 STA-38 p 218, ARK-38 p 145.
- 286 URA-35 p 59, KIR-36 p 369, URA-36 p 67.
- 287 TTR pp74-75.
- 288 VOR p 33 LEN-33 p 80, GK-34 pp 42-43, GOR-34 pp 42-43, GOR-34 p 131, ROS-34 p 194, SMO p 29.
- 289 TIF p 161.
- 290 ORT p 228.
- 291 ROS-36 p 272, GOR-36 p 43 ARK-38 p 144.
- 292 see MAL p 190, LEN-33 p 70.
- 293 NOV-33 p 139, MKO-34 pp 23-24.
- 294 STA-34 p 51.
- 295 BNK No 15,1934,pp 2-5.
- 296 GOR-34 p 152, PR-34 p 102, SMO pp 44-45.
- 297 ETI p 101.
- 298 TIF pp 178-79.
- 299 ORT p 151, ARK-38 p 134.
- 300 STA-34 p 46.
- 301 For the full price list see UFA-33b pp 47-50.
- 302 KHA p 1.
- 303 ROS-34 p 74, GOR-34 pp 277-307, PR-34 p 66, NOV-35 p 200.
- 304 MOS-35 pp 19-20.
- 305 OTR, pp 5-6, NOV-36 p 3.
- 306 SBP No 11, May 1937, p 1.
- 307 KIR pp 192-217, URA-36 p 61, ROS-37 p 11, UFA-37 pp 8-12, ARK-38 p 127.
- 308 ORT p 6.
- 309 JC-50 p 76.

310 JC-50 p 76.
 311 SOV-35 pp 46-47.
 312 UFA-33b p 47.
 313 STA-34 p 46.
 314 ROS-34 p 76.
 315 GOR-34 pp 277-307, PR-34 p 70, NOV-35 pp 200-19.
 316 MOS-35 p 21.
 317 NOV-36 p 5.
 318 SBP No 11, May 1937, p 1.
 319 LEN-36 p 6.
 320 UFA-33b p 47.
 321 STA-34 p 46.
 322 ROS-34 p 81.
 323 GOR-34 pp 277-307, PR-34, p 83, NOV-35 pp 200-19.
 324 MOS-35 p 28.
 325 NOV-36 p 11.
 326 SBP No 11, May 1937, p1.
 327 LEN-34 p 6.
 328 GOR-34 p 153.
 329 ROS-34 pp 96-97.
 330 PR-34 p 103, NOV-35 pp 247-57.
 331 ORT pp 9-10.
 332 URA-36 p 62, ROS-37 p 35, ARK-37 p 127.
 333 SBP No 11, May 1937, p 1.
 334 CHA p 192.
 335 ROS-34 p 139.
 336 GOR-34 pp 186-220.
 337 PR-34 p 37.
 338 SOT-36 p 156.
 339 NOV-35 p 177.
 340 SOT-35 p 133.
 341 ORT pp 7-8, 18, 34-35.
 342 SBP No 11, May 1937, pp 1-2.
 343 CHA p 152, ROS-37 p 181, ARK-38 p 128.
 344 VOR pp 27-29.
 345 NOV-33 p 144, LEN-33 p 3, STA-34 p 54, GK-34 p 80, ROS-34
 pp 172-74, GOR-34 p 75, NOV-35 p 147, URA-35 p 55, SMO pp 26-28,
ORT p 93.
 346 TIF pp 176-77.
 347 SBP No 22, June 1937, pp 3-4.

348 ROS-37 p 198, ARK-38 p 93.
349 SBP No 11, May 1937, pp 1-2.
350 CHA pp 89, 192, 271-72.
351 ORT p 92.
352 ROS-34 p 163.
353 GOR-34 pp 251-54.
354 UFA-33a pp 127-38, NOV-33 pp 141-42, KHA pp 86-95,
NOV-35 pp 149-50.
355 ORT pp 91-92.
356 NOV-36 p 9.
357 SBP No 11, May 1937, pp 102.
358 UFA-37 pp 16-17, ROS-37 pp 88-89.
359 CHA pp 193, 263064.
360 ORT p 92.
361 ROS-34 p 164.
362 GOR-34 pp 251-54.
363 UFA-33 a pp 127-38, NOV-33 pp 141-42, KHA pp 86-95,
NOV-35 pp 149-50.
364 ORT pp 91-92, NOV-36 pp 15-16.
365 SBP No 11, May 1937, pp 1-2.
366 UFA-37 pp 16-17, ROS-37 pp 88-89.
367 ROS-34 p 164.
368 GOR-34 pp 251-54.
369 UFA-33a pp 127-38, NOV-33 pp 141-42, KHA pp 86-95,
NOV-35 pp 149-50.
370 ORT pp 91-92, NOV-36 pp 16-17.
371 UFA-37 pp 16-17, ROS-37 pp 88-89, SBP No 11, May 1937, pp 1-2.
372 CHA pp 193, 266.
373 ORT p 92.
374 GOR-34 pp 251-54.
375 UFA-33a pp 127-38, NOV-33 pp 141-42, KHA pp 86-95, NOV-35 pp 149-50.
376 ORT pp 91-92, NOV-36 pp 16-17.
377 UFA-37 pp 16-17, ROS-37 pp 88-89, SBP No 11, May 1937 pp 1-2.
378 CHA pp 193, 266-67.
379 ORT p 92.

APPENDIX C

Comparability of the Goods Priced in 1928 and 1934-37

This appendix examines the comparability of the goods presented in Appendix B.

1 Rye flour (95%)

It is assumed that all of the types quoted are 95 per cent extraction rate rye flours and as such are closely comparable.

2 Wholewheat flour (96%)

As in the case of the above, it is assumed that the types of flour listed are closely comparable, since they are all 96 per cent extraction rate flours.

3 Rye bread (95%)

It appears that the types of bread listed - either simply "rye" bread or "sour rye" bread - are all made from 95 per cent extraction rate flour and as such are closely comparable.

4 Wheat bread (80-85%)

As Chapman indicates, the difference between the 80 per cent extraction rate flour used in the production of the bread quoted for 1928 and the 85 per cent extraction rate flour quoted for 1937 - and 1934-37 in my study - is relatively minor, but it means that the comparison understates the true price difference.¹ Chapman also points out that it is possible that price quotations for the first half of 1928 may refer to bread made from a 60 per cent extraction rate flour. If this were so then there would be a considerable understatement of the price increase.

5 Ground millet, 1st sort

Given the close similarity between the 1928 urban prices it is assumed that they all refer to 1st sort ground millet and as such are closely comparable to those quoted in 1934-37.

6 Buckwheat groats

The description of the good in question is broadly similar in all cases, being either buckwheat groats or hulled buckwheat groats, and it is assumed that they are closely comparable.

7 Rice

Given the differences between the type of rice quoted for 1928 and the multiple types of rice quoted for 1934-37 there is some scope for error in the price comparisons.

8 Melted butter

Taking into account the changes in the description of this good after 1928, it is assumed that the types of melted butter listed are closely comparable.

9 Sunflower oil

It is assumed that all of the prices quoted refer to refined oil, although the 1928 price quotes do not mention this, and that the oils were sold in bulk--this is almost certain in the case of the 1933-37 quotes, since no mention of bottles or corks is made.

10 Sugar, granulated

All of the quotations give the same description of this type of sugar, and it is assumed that they are closely comparable.

11 Sugar, lump

As in the case of granulated sugar the same descriptions of this good are provided throughout this period and it is assumed that they are closely comparable.

12 Herring, ordinary, salted

In line with Chapman's practice it is assumed that the types of herring listed are broadly comparable.²

13 Pike-perch, fresh, frozen or salted

Following Chapman, it is assumed that the goods are comparable, since the 1937 prices for fresh and frozen pike-perch also encompass those for salted varieties of the same fish.³

14 Salt

Since the types of salt listed in the pricing handbooks for 1933-37 do not indicate the area of origin of salt, it is not possible to say that they are closely comparable with the salt quoted for 1928 (which does have its area of origin indicated). Therefore, the cheapest types of ground salt for 1933-37 have been used as a comparison. Given that the 1928 salt prices are all similar and include a quotation for "ground salt", it is assumed that they are comparable.

15 Tea

Following Chapman, it is assumed that the Chinese tea quoted for 1928 was a black "baikhovyi" type.⁴ In the village in 1933-35 the only teas sold in the normal fund that were black baikhovyi, were No 80 and No 4, so an average of these two teas has been used as a

comparison. Since the average of the prices of these teas is approximately 12 per cent above that for tea No 105, which Chapman gives as comparable to the 1928 tea, and which was only sold in the town in 1933-35, it is possible that there is some margin for overstatement of the price change. The unitary price comparisons with 1928 refer to a Chinese black baikhovyi tea and are assumed to be comparable.

The commercial fund quotation refers to black baikhovyi No 105 tea and tea No 1, but it is assumed that this refers to the same type of tea as above, even though one source lists an Indian tea of this type.⁵

16 Vodka

The 1928 price quotes refer to vino khlebnoe, whereas those for 1934 onwards refer to pshenichnaya vodka. It is possible that the latter was of a higher quality than the vino khlebnoe of 1928. Of the sources for 1933-37 only GOR-34 lists a price for khlebnoe vino (of R 3.75/half litre), the rest list wheat vodka alone.⁶ Since Chapman says that both khlebnoe vino in 1928 and pshenichnaya vodka in 1937 were 40° proof, and there seems to have been limited availability of other types of vodka (if at all), comparison is made with wheat vodka.⁷ The possibility of over-estimation of the price change should be borne in mind, as should the possibility that the introduction of the higher priced wheat vodka variety was a method of disguising a rise in the price of such an important product (vodka at this time had a label price). Malafeev notes that this type of vodka was introduced from June 1932, a period of rapidly rising prices, and its price was 1.5 times greater than that prevailing previously for khlebnoe vino.⁸

17 Cigarettes

Chapman indicates that sort 2A cigarettes in 1928 were comparable to sort 3 essentially sort 4 (3 sort sushchestv. 4s) in March 1932 - July 1933; domestic market 3 sort (vnutrenn. r 3 sort); and 3 sort (3 sort) from January 1935 on.⁹

18 Smoking makhorka

In each year the good referred to is smoking makhorka (makhorka kuritel'naya). It is assumed that they are comparable.

19 Matches

It is uncertain precisely which matches are the basis for the 1928 price quotes, since the data for 1928 refers either to Swedish matches or to simply "matches". It is assumed that they are broadly comparable and that the cheapest type of matches is quoted. So far no evidence of a range of prices for different types in 1933-37 has been uncovered.

20 Household soap

It appears that the soaps quoted in 1928 were all 47 per cent fat content marbled soaps. For 1933-37 40 per cent fat content soaps have been chosen. The sources do not indicate whether these were marbled. The 40 per cent fat content soap was chosen because it is assumed that it was similar to those in 1928 and data on this type of soap is fuller, and it may have been the main type of household soap available in the village at this time. It is possible that this comparison will under-estimate the change in prices at this time.

21 Paraffin

None of the sources mention different types or sorts of paraffin, so it is assumed that they are closely comparable.

22 Thread

All of the threads quoted are either six-strand types or Bear and Deer brands, and as such it is assumed that they are closely comparable.

23 Calico

The quotations appear to be of broadly comparable cloth. They are of the same width and it is assumed that cloth Nos 6, 06a, 6a and 6b are of a similar standard. Although it is not stated in every case it is also assumed that the cloths are of ordinary dye and print.

24 Coarse calico No 40

It appears that the No 40 and 40a cloths are similar. They are of roughly the same width and are bleached. It is also assumed that they are of ordinary dye and print.

25 Moleskin

Both No 220 and 220a appear to be of a similar standard and both are approximately 62cm wide. Therefore it is assumed that they are similar cloths.

26 Woollen cloth

Given that all of the cloths are "A" type broadcloths, with cotton warp and are either 133cm or 136cm wide, it is assumed that they are similar.

27 Cotton socks, men's

Following Chapman, it is assumed that the socks compared are probably fairly close.¹⁰

28 Galoshes, men's

All of the quotations refer to the same type of galoshes (art No 110) It is assumed that they are all 1st sort, and are closely comparable.

29 Boots, men's, black

The descriptions of these boots appear to indicate that they are comparable.

30 Boots, ladies'

These boots appear to be closely comparable.

31 Ladies' oxfords

These shoes appear to be closely comparable.

32 Children's oxfords

These shoes appear to be closely comparable. The 1933-37 descriptions do not indicate the shoe size, but it is assumed that the price refers to the standard children's sizes.

FOOTNOTES

- 1 CHA pp 201-202.
- 2 CHA p 216.
- 3 CHA p 215.
- 4 CHA p 241.
- 5 TIF p 29.
- 6 GOR-34 p 53.
- 7 CHA pp 242-43.
- 8 MAL p 166.
- 9 CHA pp 299-300.
- 10 CHA p 260.

APPENDIX D

Regional Data Used to Weight the Belt Prices

This appendix presents the calculations of the regional weights used to determine the average belt prices in 1934-37. It consists of Appendix Tables D1 and D2 and lengthy explanatory notes. As can be seen from Appendix Table D1, the basis of the weighting system is rural retail socialised trade in 1934. It is believed that this will provide a more accurate method for weighting regional prices than population data, because it will reflect regional spending and supply patterns.

In Appendix Table D2, all supplementary data on urban and rural retail turnover in the first quarter of 1935 is taken from SOV-35.¹

FOOTNOTES

1 SOV-35 pp 46-47

Appendix Table D1

Turnover of Rural Retail Socialised Trade in 1934, Various Areas
of the USSR (m.rubles)

	<u>m.rubles</u>	<u>% of total</u>
1 Northern Krai	348.1	2.3
2 Karelian ASSR	94.2	0.6
3 Leningrad Oblast	650.2	4.3
4 Western Oblast	463.0	3.1
5 Moscow Oblast	993.3	6.6
6 Ivanovo Oblast	388.3	2.6
7 Gorkii Krai }	724.0	4.8
8 Kirov Krai }		
9 Tatar ASSR	294.1	1.9
10 Kuibyshev Krai	657.2	4.3
11 Saratov Krai	184.0	1.2
12 Volga-German Republic	46.7	0.3
13 Stalingrad Krai	301.5	2.0
14 Voronezh Oblast	557.6	3.7
15 Kursk Oblast	358.1	2.4
16 Azov-Black Sea Krai	583.6	3.9
17 North Caucasus Krai	308.8	2.0
18 Dagestan ASSR	61.2	0.4
19 Crimean ASSR	114.1	0.8
20 Bashkir ASSR	293.7	1.9
21 Sverdlovsk Oblast	335.7	2.2
22 Chelyabinsk Oblast	287.9	1.9
23 Kazakh ASSR	473.4	3.1
24 Kara-Kalpak ASSR	43.0	0.2
25 Kirgiz ASSR	104.9	0.7
26 Ob'-Irtysh Oblast	60.9	0.4
27 West-Siberian Krai	885.3	5.9
28 East-Siberian Krai	592.3	3.9
29 Yakut ASSR	81.4	0.5
30 Far-Eastern Krai	392.7	2.6
31 Ukrainian SSR	2629.9	17.4
32 Belorussian SSR	441.1	2.9
33 ZSFSR	620.9	4.1
34 Uzbek SSR	531.1	3.5
35 Tadzhik SSR	114.5	0.8
36 Turkmen SSR	124.7	0.8
37 Total of areas listed	15141.4	100
38 Total USSR (including areas not listed)	15423.2	
39 Line 37 as % of line 38	98.2%	

Source: TsUNKhU Gosplana, Sotsialisticheskoe stroitel'stvo SSSR,
Moscow 1936, pp 615-17.

Appendix Table D2

Turnover of Rural Retail Socialised Trade in 1934, and Allocation of Price Belts (m rubles)

	1 Rural turnover (% of total)	2 Grain products pulses groats 1935, 1st $\frac{1}{2}$ 1936		3 Grain products pulses groats 2nd $\frac{1}{2}$ 1936, 1937	
		Belt	%	Belt	%
		a	b	a	b
1 Northern Krai	2.3	5	.	5	.
2 Karelian ASSR	0.6	5	.	5	.
3 Leningrad Oblast	4.3	4	.	4	.
4 Western Oblast	3.1	3	.	3	.
5 Moscow Oblast	6.6	3	.	3	.
6 Ivanovo Oblast	2.6	3	.	3	.
7 Gorkii Krai)	4.8	3	.	3	.
8 Kirov Krai)					
9 Tatar ASSR	1.9	2	.	2	.
10 Kuibyshev Krai	4.3	2	.	2	.
11 Saratov Krai	1.2	2	.	2	.
12 Volga-German Rep.	0.3	2	.	2	.
13 Stalingrad Krai	2.0	2	.	2	.
14 Voronezh Oblast	3.7	3	.	3	.
15 Kursk Oblast	2.4	3	.	3	.
16 Azov-Black Sea Krai	3.9	2	.	2	.
17 North Caucasus Krai	2.0	2	.	2	.
18 Dagestan ASSR	0.4	2	.	2	.
19 Crimean ASSR	0.8	3	.	2	.
20 Bashkir ASSR	1.9	2	.	2	.
21 Sverdlovsk Oblast	2.2	4	.	4	.
22 Chelyabinsk Oblast	1.9	3	.	3	.
23 Kazakh ASSR	3.1	1/2	0.3/2.8	2	.
24 Kara-Kalpak ASSR	0.2	1	.	1	.
25 Kirgiz ASSR	0.7	1/2	0.2/0.5	2	.
26 Ob'-Irtysh Oblast	0.4	3	.	2	.
27 West-Siberian Krai	5.9	2	.	2	.
28 East-Siberian Krai	3.9	4/6	2.6/1.3	4/6	2.6/1.3
29 Yakut ASSR	0.5	7	.	7	.
30 Far-Eastern Krai	2.6	7/8	1.3/1.3	3	.
31 Ukrainian SSR	17.4	2/3	16.4/1.0	2	.
32 Belorussian SSR	2.9	3	.	3	.
33 ZSFSR	4.1	3	.	3	.
34 Uzbek SSR	3.5	1	.	1	.
35 Tadzhik SSR	0.8	1	.	1	.
36 Turkmen SSR	0.8	1	.	1	.

A dot in columns 2b, and 3b, indicates that the same percentage as in col 1 applies.

Appendix Table D2 (continued)

Turnover of Rural Retail Socialised Trade in 1934, and Allocation of
Price Belts (m rubles)

	4 Melted butter	5 Sugar	6 Fish Belt a	% b
1 Northern Krai	1	3	2	.
2 Karelian ASSR	4	3	2	.
3 Leningrad Oblast	4	2	2	.
4 Western Oblast	2	2	4	.
5 Moscow Oblast	4	2	4	.
6 Ivanovo Oblast	2	3	4	.
7 Gorkii Krai)	2	3	4	.
8 Kirov Krai)				
9 Tatar ASSR	1	3	4	.
10 Kuibyshev Krai	1	3	3	.
11 Saratov Krai	3	3	3	.
12 Volga-German Rep	3	3	3	.
13 Stalingrad Krai	3	3	1	.
14 Voronezh Oblast	2	1	4	.
15 Kursk Oblast	2	1	4	.
16 Azov-Black Sea Krai	2	1	1	.
17 North Caucasus Krai	3	3	3	.
18 Dagestan ASSR	3	3	2	.
19 Crimean ASSR	4	3	2	.
20 Bashkir ASSR	1	3	5	.
21 Sverdlovsk Oblast	2	3	4	.
22 Chelyabinsk Oblast	1	3	4	.
23 Kazakh ASSR	1	3	2/5	0.6/2.5
24 Kara-Kalpak ASSR	5	3	5	.
25 Kirgiz ASSR	5	3	5	.
26 Ob'Irtysh Oblast	1	3	2	.
27 West-Siberian Krai	1	3	4	.
28 East-Siberian Krai	3	4	3	.
29 Yakut ASSR	3	4	3	.
30 Far-Eastern Krai	5	4	1	.
31 Ukrainian SSR	2	1	3/4	2.1/15.3
32 Belorussian SSR	2	2	4	.
33 ZSFSR	5	3	2/4	1.8/2.3
34 Uzbek SSR	5	3	5	.
35 Tadzhik SSR	5	3	5	.
36 Turkmen SSR	5	3	2	.

A dot in column 6b indicates that the same percentage as in
col 1 applies.

Appendix Table D2 (continued)

Turnover of Rural Retail Socialised Trade 1934, and Allocation of
Price Belts (m rubles)

	7 Sunflower oil		8 Salt	
	Belt	%	Belt	%
	a	b	a	b
1 Northern Krai	2	.	5	.
2 Karelian ASSR	2	.	5	.
3 Leningrad Oblast	2	.	5	.
4 Western Oblast	2	.	4	.
5 Moscow Oblast	2	.	5	.
6 Ivanovo Oblast	2	.	3	.
7 Gorkii Krai)	2	.	5	.
8 Kirov Krai)				
9 Tatar ASSR	2	.	5	.
10 Kuibyshev Krai	1	.	4	.
11 Saratov Krai	1	.	4	.
12 Volga-German Rep	2	.	4	.
13 Stalingrad Krai	1	.	3	.
14 Voronezh Oblast	1	.	4	.
15 Kursk Oblast	1	.	4	.
16 Azov-Black Sea Krai	1	.	4	.
17 North Caucasus Krai	1	.	4	.
18 Dagestan ASSR	2	.	4	.
19 Crimean ASSR	2	.	4	.
20 Bashkir ASSR	1	.	5	.
21 Sverdlovsk Oblast	2	.	3	.
22 Chelyabinsk Oblast	2	.	3	.
23 Kazakh ASSR	3	.	6	.
24 Kara-Kalpak ASSR	3	.	6	.
25 Kirgiz ASSR	3	.	6	.
26 Ob'Irtysh Oblast	2	.	5	.
27 West-Siberian Krai	4	.	5	.
28 East-Siberian Krai	2/4	2.6/1.3	5	.
29 Yakut ASSR	4	.	5	.
30 Far-Eastern Krai	4	.	7	.
31 Ukrainian SSR	1	.	1/3	2.9/14.5
32 Belorussian SSR	2	.	4	.
33 ZSFSR	2	.	5	.
34 Uzbek SSR	3	.	6	.
35 Tadzhik SSR	3	.	6	.
36 Turkmen SSR	3	.	6	.

A dot in column 7b and 8b indicates that the same percentage as in col 1 applies.

Appendix Table D2 (continued)
Turnover of Rural Retail Socialised Trade 1934, and Allocation of
Price Belts (m rubles)

		9	10		11	
			Cotton cloth		Woollen cloth	
			Belt	%	Belt	%
			a	b	a	b
1	Northern Krai	2	3	.	3	.
2	Karelian ASSR	2	4	.	2	.
3	Leningrad Oblast	2	2-1/2	4.3-3.4/0.9	2-1/2	4.3-3.4/0.9
4	Western Oblast	2	2	.	2	.
5	Moscow Oblast	2	2-1/2	6.6-4.9/1.7	2-1/2	6.6-4.9/1.7
6	Ivanovo Oblast	2	2	.	2	.
7	Gorkii Krai	2	2/4	4.3/0.5	2/3	4.3/0.5
8	Kirov Krai					
9	Tatar ASSR	2	3	.	3	.
10	Kuibyshev Krai	2	3	.	3	.
11	Saratov Krai	2	3	.	3	.
12	Volga-German Rep	2	3	.	3	.
13	Stalingrad Krai	2	3	.	3	.
14	Voronezh Oblast	2	2	.	2	.
15	Kursk Oblast	2	2	.	2	.
16	Azov-Black Sea Krai	2	3	.	3	.
17	North Caucasus Krai	2	3	.	3	.
18	Dagestan ASSR	2	5	.	5	.
19	Crimean ASSR	2	3	.	3	.
20	Bashkir ASSR	2	3	.	3	.
21	Sverdlovsk Oblast	2	3	.	3	.
22	Chelyabinsk Oblast	2	3	.	3	.
23	Kazakh ASSR	2	5	.	5	.
24	Kara-Kalpak ASSR	2	4	.	4	.
25	Kirgiz ASSR	2	4	.	4	.
26	Ob'-Irtysk Oblast	1	4	.	4	.
27	West-Siberian Krai	1	4	.	4	.
28	East-Siberian Krai	1	5	.	5	.
29	Yakut ASSR	2	5	.	5	.
30	Far-Eastern Krai	1	5	.	5	.
31	Ukrainian SSR	2	3	.	3	.
32	Belorussian SSR	2	2	.	2	.
33	ZSFSR	2	4	.	4	.
34	Uzbek SSR	2	4	.	4	.
35	Tadzhik SSR	2	5	.	5	.
36	Turkmen SSR	2	4	.	4	.

A dot in columns 10b and 11b indicates that the same percentage as in col 1 applies.

Appendix D2 (continued)

Turnover of Rural Retail Socialised Trade 1934, and Allocation of Price Belts (m rubles)

	12 Knitwear		13 Footwear	
	Belt a	% b	Belt a	% b
1 Northern Krai	3	.	4	.
2 Karelian ASSR	3	.	4	.
3 Leningrad Oblast	2-1/2	4.3-3.4/0.9	2-1/2	4.3-3.4/0.9
4 Western Oblast	2	.	3	.
5 Moscow Oblast	2-1/2	6.6-4.9/1.7	2-1/2	6.6-4.9/1.7
6 Ivanovo Oblast	2	.	2	.
7 Gorkii Krai)	2/3	4.3/0.5	3/4	3.0/1.8
8 Kirov Krai)				
9 Tatar ASSR	3	.	4	.
10 Kuibyshev Krai	3	.	4	.
11 Saratov Krai	3	.	4	.
12 Volga-German Rep	3	.	4	.
13 Stalingrad Krai	3	.	4	.
14 Voronezh Oblast	2	.	3	.
15 Kursk Oblast	2	.	3	.
16 Azov-Black Sea Krai	3	.	2	.
17 North Caucasus Krai	3	.	2	.
18 Dagestan ASSR	5	.	6	.
19 Crimean ASSR	3	.	4	.
20 Bashkir ASSR	3	.	4	.
21 Sverdlovsk Oblast	3	.	4	.
22 Chelyabinsk Oblast	3	.	4	.
23 Kazakh ASSR	5	.	6	.
24 Kara-Kalpak ASSR	4	.	5	.
25 Kirgiz ASSR	4	.	5	.
26 Ob'Irtysh Oblast	4	.	4	.
27 West-Siberian Krai	4	.	4	.
28 East-Siberian Krai	5	.	6	.
29 Yakut ASSR	5	.	6	.
30 Far-Eastern Krai	5	.	6	.
31 Ukrainian SSR	3	.	2	.
32 Belorussian SSR	2	.	2	.
33 ZSFSR	4	.	4	.
34 Uzbek SSR	4	.	5	.
35 Tadzhik SSR	5	.	5	.
36 Turkmen SSR	4	.	5	.

A dot in columns 12b and 13b indicates that the same percentage in col 1 applies.

Notes to Appendix Table D2

Col 1: Data from Appendix Table D1.

Col 2: See section 1 of Appendix B for a description of the pricing belts relating to grain products, pulses and groats. In the table, 10 per cent of the total weight for Kazakhstan was allocated to South Kazakhstan Oblast (Belt I), and approximately 29 per cent of the total weight for Kirgiz ASSR was allocated to the 10 raions from the republic included in Belt I. These are rough estimates based on population levels and available data on incomes. The data on Ukrainian SSR (including Moldavian ASSR) was split according to the percentage of rural retail turnover in the first quarter of 1935 taken up by Dnepropetrovsk and Odessa Oblasts (5.5% of the total), and the resulting 1.0 per cent allocated to Belt III. The remainder was allocated to Belt II. One third of the weight for East-Siberian Krai (1.3%) was allocated to Buryat-Mongolian ASSR in Belt VI, on the basis of rural turnover data for these areas in the first quarter of 1935. The remainder was allocated to Belt IV. The weight for Far-Eastern Krai was split evenly between Belts VII and VIII, as a rough approximation. In all other cases it was impossible to split the weights allocated to the belts to take into account minor areas and okrugs.

Col 3: In mid-1936 Belt VIII was abolished and Sakhalin and Kamchatka Oblasts (Far-Eastern Krai) were transferred to Belt III. Crimean ASSR was moved to Belt II, Kazakh and Kirgiz ASSRs were moved to Belt II, and all of Ukrainian SSR was included in Belt II. It was not possible to adjust the weights to take into account minor areas and okrugs allocated between belts.

Col 4: See section 8 of Appendix B for a description of the pricing belts. In the table, Ob'-Irtyskh Oblast has been included in Belt I, to cover Omsk Oblast. It is assumed that most of Kalinin Oblast is covered by the former Western Oblast. Dagestan ASSR has been included in Belt III along with North Caucasus Krai. The Volga-German ASSR has been included in Belt III along with Saratov, Stalingrad and Kuibyshev Krai. No attempt was made to break down the data for Orenburg Oblast and Krasnoyarsk Krai.

Col 5: See section 10 of Appendix B for a description of the pricing belts. In the table, the figures in Belt II have not been broken down for Kalinin Oblast, but it is believed that this is already covered in the 1934 data.

Col 6: See section 12 of Appendix B for a description of the pricing belts. In the table Ob'Irtysh Oblast has been allocated to Belt II; 20 per cent of Kazakh ASSR has been allocated to Belt II to cover West and South Kazakhstan. Azerbaijan (Belt II) has been allocated 43.4 per cent of the weight of ZSFSR; and Odessa Oblast (Belt III) - 11.8 per cent of the weight for Ukrainian SSR, on the basis of rural retail turnover data for these areas in the first half of 1935. Volga-German ASSR has been allocated to Belt III along with Saratov and Kuibyshev Krai. It was not possible to give a breakdown of the data for Kalinin Oblast, Murmansk Okrug or Orenburg Oblast. It is assumed that these areas are already covered in those listed. It is unlikely that any significant variation in the average prices will result from this.

Col 7: See section 9 of Appendix B for a description of the pricing belts. In the table, Buryat-Mongolian ASSR has been allocated 1.3 per cent out of the 3.9 per cent of East-Siberian Krai, in line with the percentage breakdown of rural retail trade in the first quarter of 1935. There was insufficient data to enable a separate quote to be given for Orenburg Oblast.

Col 8: See section 14 of Appendix B for a description of the pricing belts. In the table, Moscow city and Gorkii city have been excluded, because the data refers to the rural sector. Donetsk Oblast has been allocated 16.5 per cent of the weight for the Ukrainian SSR, on the basis of rural retail turnover data in the first quarter of 1935. Volga-German ASSR has been included in Belt IV along with Saratov Krai. Yakut ASSR has been included in Belt V along with Siberia. Ob'-Irtysh Oblast has been included in Belt V, instead of Omsk Oblast. No attempt was made to give separate data for Orenburg Oblast, Krasnoyarsk Krai or Kalinin Oblast.

Col 9: See section 21 of Appendix B for a description of the pricing belts. In the table, Ob'Irtysh Oblast has been included in Belt I.

There was no data available for Krasnoyarsk Krai. It is unlikely that this will have any significant effect on the average prices.

Col 10: See section 23 of Appendix B for a description of the pricing belts. In the table, 10.9 per cent of the combined percentage weight of Gorkii and Kirov Krai has been ascribed to Udmurt ASSR, on the basis of the data for the first quarter of 1935. Ob'-Irtysk Oblast has been included in Belt IV in place of Omsk Oblast. It is assumed that Kalinin Oblast is already covered in Belt II, and that Orenburg Oblast is covered in Belt III. It is also assumed that Krasnoyarsk Krai is already covered in Belt V. Belt I has been included, because special prices introduced for these goods in July 1936 will have a significant effect on our urban price data. Thus, the weights for the rural USSR will consist of the areas listed in the table. The weights for the urban USSR will be as follows:

Belt I will consist of 74.0 per cent of the Moscow Oblast weight (4.9%) and 80.0 per cent of the Leningrad Oblast weight (3.4%), the remainder (1.7% and 0.9% respectively), will remain in Belt II. The breakdown of the Moscow and Leningrad weights was made on the basis of the percentage of urban turnover accounted for by the cities of Moscow and Leningrad in the first quarter of 1935. It is accepted that this is a second best alternative, but it is believed that the consequent effect of any bias on the price data will not be significant. No other changes to the belts were introduced.

Col 11: See section 26 of Appendix B for a description of the pricing belts. In the table, the allocation of areas to the belts is the same as that in col 10, except that Karelian ASSR (0.6%) has been allocated to Belt II, and Udmurt ASSR (0.5%) has been allocated to Belt III.

Col 12: See section 26 of Appendix B for a description of the pricing belts. In the table, the allocation of areas to the belts is the same as that in col 10, except that Karelian ASSR (0.6%) has been allocated to Belt II and Udmurt ASSR (0.5%) has been allocated to Belt III.

Col 13: See section 29 of Appendix B for a description of the pricing belts. In the table, it is assumed that Kalinin Oblast and Krasnoyarsk Krai are already covered in Belts II and VI. Gorkii Krai (Belt III) was allocated 61.8 per cent of the weight for Gorkii and Kirov Krai,

and Kirov Krai (Belt IV) was allocated the remainder, on the basis of the percentage breakdown of the rural retail turnover of these areas in the first quarter of 1935. Ob'-Irtysk Oblast has been included in Belt IV in place of Omsk Oblast. It was not possible to break down the data for Uzbek SSR. It is believed that this will not significantly affect the price statistics. The breakdown of the Belt I percentages is the same as that in col 10.

APPENDIX E

The Weights Used in the Study

Table E1 presents the weights used in the calculation of the price indices. They are based on retail trade turnover in rural sector co-operative trade. The notes accompanying the table indicate how the weights were calculated.

Retail sales were used as the basis for the weights, because the budget studies at this time did not provide sufficient detail to enable a breakdown into the major groups of goods, and sub-groups, purchased to be made.

Table E1
Weights Used in the Study, 1928, 1934, 1935 (00m rubles)

Group	Representative Good	1 1928	2 1934	3 1935
1 Flour, groats & pulses		1.85	8.24	12.61
a) Rye flour	Rye flour (95%)	0.41	1.72	2.70
b) Wheat flour	Wholewheat flour (96%)	1.18	3.75	5.75
Total flour		1.59	5.52	8.45
c) Ground millet	Ground millet, first sort	0.09	0.91	1.39
d) Buckwheat groats	Buckwheat groats	0.09	0.91	1.39
e) Rice	Rice, first & second sort	0.09	0.91	1.39
Total groats and pulses		0.26	2.72	4.16
2 Bread & bakery products		0.21	2.95	35.28
a) Rye bread	Rye bread (95%)	0.06	0.79	9.53
b) Wheat bread	Wheat bread (85%)	0.15	2.16	25.75
3 Vegetable oil	Sunflower oil	0.30	0.57	0.80
4 Butter	Melted butter	0.02	0.48	0.68
5 Herring & other fish		1.02	2.18	4.49
a) Herring	Herring, salted	0.22	0.46	1.17
b) Other fish	Pike-perch, fresh & frozen	0.80	1.72	3.32
6 Sugar		2.23	4.65	9.13
a) Granulated	Granulated sugar	1.12	2.33	4.57
b) Lump	Lump sugar	1.12	2.33	4.57
7 Salt	Salt	0.36	1.32	1.29
8 Vodka	Wheat vodka	1.52	38.94	37.34
9 Tea	Tea, black, baikhovyi	0.48	0.93	1.55
10 Total foodstuffs (1-9)		7.99	60.26	103.17
11 Total foodstuffs (including processed agricultural products)		10.74	74.02	124.51
12 Line 10 as % of line 11		74.4%	81.4%	82.9%

Table E1 (continued)

Group	Representative Good	1 1928	2 1934	3 1935
13 Cotton cloth		5.45	15.35	16.49
a) Calico	Calico No 6	1.82	5.53	5.28
b) Sheeting cotton	Coarse calico No 40	1.82	3.53	4.29
c) Moleskin	Moleskin	1.82	6.29	6.92
14 Woollen cloth	Woollen cloth	0.70	2.96	4.19
15 Knitwear	Gent's cotton socks	0.37	4.21	4.76
16 Leather footwear		0.51	5.32	5.77
a) Men's boots	Boots, men's, black	0.13	1.33	1.45
b) Ladies' boots	Boots, ladies'	0.13	1.33	1.45
c) Ladies' oxfords	Ladies' oxfords	0.13	1.33	1.45
17 Galoshes	Galoshes, men's, low	0.28	2.57	2.97
18 Household soap	Household soap (40% fat)	0.39	2.57	3.29
19 Makhorka	Smoking makhorka	0.58	1.51	2.72
20 Cigarettes	Cigarettes, third sort	0.41	3.54	4.09
21 Matches	Matches	0.28	0.92	1.13
22 Paraffin	Paraffin	0.59	1.37	1.92
23 Haberdashery	Thread, six-strand	1.62	4.07	4.27
24 Total non-foodstuffs (13-23)		11.18	44.39	51.60
25 Total non-foodstuffs listed in handbooks		15.56	77.87	89.52
26 Line 24 as % of line 25		71.9%	57.0%	57.6%
27 Total foodstuffs and non-foodstuffs (lines 10 & 24)		19.17	104.65	154.77
28 Total foodstuffs and non-foodstuffs (lines 11 & 25)		26.30	151.89	214.03
29 Line 27 as % of line 28		72.9%	68.9%	72.3%

Notes to Table

1928: This is based on rural retail turnover for consumer co-operatives taken from TGR pp 28-29.

1934-35: Rural retail turnover for state and co-operative trade, taken from SOT-36 p 70.

Breakdown of the weights

1 Flour, groats and pulses

1928: The source for this year lists flour, groats and pulses, without listing bread. Since it is known that bread was sold in state retail trade at this time it is assumed that the weight for flour, groats and pulses includes bread and bakery products. A notional 10 per cent of the weight has been allocated to bread and bakery products (see below), this leaves R 185m for flour, groats and pulses. This weight was divided as follows: rye flour - 22 per cent; wheat flour - 64 per cent; groats and pulses - 14 per cent. This was based on the percentage of rural retail co-operative trade accounted for by the two types of flour and "various groats" (krupa raznaya) in 1926/27.¹ The weight for groats and pulses was divided equally between millet, buckwheat and rice.

1934:35: Flour was allocated 67 per cent of the weight, and groats and pulses - 33 per cent, on the basis of the breakdown of total retail sales in socialised trade in 1937.² The weight for groats includes macaroni goods. Rye flour was allocated 32 per cent of the weight for flour; and wheat flour - 67 per cent, on the basis of the market fund of flour in 1935.³ The weight for groats and pulses was allocated equally between the three listed.

2 Bread and bakery products

1928: Although this source did not list sales for bread and bakery products in either the urban or rural sectors, it is known that in 1928 bread and bakery products worth R 225m were sold in state and co-operative trade.⁴ SOT-36 shows that in 1932 a total of R 526.4m worth of flour, groats, pulses, macaroni goods and bread and bakery products was sold in rural state and co-operative trade, and of this 20 per cent was taken up by bread and bakery products.⁵ It is felt that in 1928 the percentage would have been much lower, because the rural bread baking industry was not developed. Thus, assuming that

the weight for flour, groats and pulses includes bread and bakery products, it has been decided to give the latter a weight of 10 per cent of the former - ie, R 21m out of R 206m. This was divided between rye and wheat bread on the basis of 26 per cent for the former and 74 per cent for the latter - the same as that for rye and wheat flour in 1928, see above.

1934, 1935: Rye bread was allocated 27 per cent of the weight and wheat bread - 73 per cent, on the basis of the breakdown of the output of the bread baking industry in 1936.⁶

3 Vegetable oil

1928, 1934, 1935: One good, sunflower oil, is assumed to be representative.

4 Butter

1928: This source does not list sales of butter. It is assumed that it is included in the section "other groceries". According to Molochnikov⁷ sales of butter and cheese in rural consumer co-operatives in 1926/27 were 8 per cent of those of "vegetable oil". This has been taken as broadly representative of butter sales, and a weight of R 2m has been allocated. It is believed that cheese sales were too small to have any influence on the overall figure.

1934, 1935: Melted butter is assumed to be representative. The figure for 1935 is 42 per cent of the total turnover of butter, margarine and vegetable oil - the percentage represented by butter in the total for these goods in 1934.

5 Herring and other fish

1928: The weight was divided on the basis of the breakdown of the total fish catch in 1929 - 22 per cent herring, 78 per cent other fish.⁸ It is clear that the 1928 retail sales data refers to all fish, including herring, even though it claims to be referring to herring alone.

1935: The weight was divided on the basis of sales in rural retail socialised trade in 1934 - 21 per cent for herring, 79 per cent for other fish.⁹

6 Sugar

1928, 1934, 1935: Following Chapman, the weight between granulated

and lump sugar has been divided equally, because of the unreliability of output data as an indicator of this relationship (granulated sugar was used in the production of lump sugar, and CHA notes that there may have been an element of double counting in the output figures).¹⁰

7 Salt

1928, 1934, 1935: One good has been given as representative of this group.

8 Vodka

1928: Following Chapman, vodka sales have been taken as 66 per cent of sales of all alcoholic drinks (R 230.6).¹¹

1934, 1935: The original data was for vodka (khlebnoe vino).

9 Tea

1928: One good was quoted in the original source.

1934: One good was quoted in the original source.

1935: This is 13 per cent of the total turnover of meat and meat goods, tea, vegetables and potatoes, fruit, berries and melons and "other foodstuffs" - the percentage of the total turnover of these goods in 1934 accounted for by tea.

Line 11: 1928: This is the figure for total retail sales of manufactured foodstuffs and processed agricultural products (flour, groats and pulses) in rural consumer co-operatives in 1928.

1934, 1935: Total sales of foodstuffs in rural state and co-operative trade in 1934 and 1935, minus meat and meat products, potatoes, vegetables, and fruit, berries and melons.

13 Cotton cloth

1928: Due to a lack of data the three types of cloth listed have been given equal weights.

1934: The weight was divided as follows: calico - 36 per cent; sheeting cotton - 23 per cent; and moleskin 41 per cent. The division was made on the basis of output data for 1935 multiplied by the average village price for each type of cloth.¹²

1935: The weights were divided as follows: calico - 32 per cent; sheeting cotton - 26 per cent; and moleskin - 42 per cent. The same method as for 1934 was used, but output and pricing data was substituted.¹³

14 Woollen cloth

1928: This is the retail turnover data for woollen and worsted fabrics (sukonno-sherstyanye i kamvol'nye tkani).

1934, 1935: This is the turnover for "other cloths" (prochie tkani).

No attempt has been made to estimate the proportion taken up by woollen cloth, but it is assumed that, on the basis of data for other years and rural spending patterns, this type of cloth would have accounted for more than 50 per cent of this group of cloths (silk did not feature strongly in rural spending patterns at this time).

15 Knitwear

1928: Turnover for made-up clothes and underwear has been given here because separate data for knitwear was not presented.

1934, 1935: The weight used was the turnover for "knitwear" in 1934 and 1935. It is assumed that the single good, gent's socks, is representative in all cases.

16 Leather footwear

1928: Data was given in the original source for "all footwear", but not including rubber footwear. It has been assumed that 82 per cent of the retail turnover for all footwear was accounted for by leather shoes. This is based on data for the production of leather footwear and valenki in 1928.¹⁴ The weight has been divided equally between the four representative types of footwear listed.

1934, 1935: This is 89 per cent of retail sales of "all footwear". The calculation was based on the percentage of output of leather footwear and valenki taken up by leather footwear in 1935.¹⁵ The weight was divided equally between the four representative types of footwear listed. It appears that the percentage of output of leather footwear and valenki taken up by leather footwear in 1934 was similar to that of 1935.¹⁶

17 Galoshes

1928, 1934, 1935: The original data was for "galoshes". One type of good has been listed as representative.

18 Household soap

1928, 1934, 1935: One good has been given as representative.

19 Makhorka

1928: Makhorka sales are assumed to account for 59 per cent of sales of makhorka, tobacco and tobacco goods in 1928. This is based on data, presented by Molochnikov on village sales in consumer co-operatives in 1926/27.¹⁷ One type of good has been listed as representative.

1934, 1935: The original data was for "makhorka".

20 Cigarettes

1928: This is 41 per cent of turnover of makhorka, tobacco and tobacco goods; see above. One type of good has been given as representative of tobacco and tobacco goods.

1934, 1935: This is the turnover for tobacco and cigarettes.

21 Matches

1928, 1935: One representative good has been used.

22 Paraffin

1928, 1934, 1935: One representative good has been used.

23 Haberdashery

1928: This is the retail turnover of "haberdashery and perfume".

1934, 1935: This is the turnover for haberdashery.

In all cases one good, thread, has been given as representative of haberdashery.¹⁸

Line 25

This is the total turnover of non-foodstuffs for each of the areas of retail trade covered in the handbooks, used as the basis for the weights.

FOOTNOTES

- 1 Z Molochnikov, Kooperativnoi magazin. Organizatsiya, trgovlya, kontrol', Moscow, 1930, p 63.
 - 2 SOT-56 p 49.
 - 3 Egorov, 1936, op.cit. p 98.
 - 4 SOT-56 p 49.
 - 5 SOT-36 p 70.
 - 6 Yu Shnirlin, "Rost potrebleniya rabocheho klassa Sovetskogo Soyuza," Planovoe Khozyaistvo No 5, 1938, p 86.
 - 7 Molochnikov 1930, p 63.
 - 8 Sotsialisticheskoe stroitel'stvo 1935, op. cit. p 272.
 - 9 See SOT-36 p 70.
 - 10 CHA pp 329-30.
 - 11 CHA p 332.
 - 12 Output data from Sotsialisticheskoe stroitel'stvo 1936, op. cit., p 195: see Appendix B for prices.
 - 13 Output data from Narodno-khozyaistvennyi plan na 1937 god, Moscow 1937, pp 98-99, see Appendix B for prices.
 - 14 See E Zaleski, Planning for Economic Growth in the Soviet Union 1928-32, North Carolina, 1971, p 334.
 - 15 See Narodno-khozyaistvennyi plan Soyuza SSR na 1937 god, Moscow 1937, pp 100-101.
 - 16 See Narodno-khozyaistvennyi plan na 1935 god, Moscow 1935 pp 536-37.
 - 17 Molochnikov, 1930, loc. cit.
 - 18 See CHA pp 319, 334.
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APPENDIX F

The Price Indices

In this appendix we present the calculation of the price indices for 1928, 1934-37, using both the Laspeyres (base-year weights), and Paasche (given-year weights) formulas, as given below:

$$1 \quad \text{Laspeyres} \quad I = \frac{\sum p_n q_o}{\sum p_o q_o} = \frac{\sum Q_o \left(\frac{p_n}{p_o} \right)}{Q_o}$$

$$2 \quad \text{Paasche} \quad I = \frac{\sum p_n q_n}{\sum p_o q_n} = \text{Reciprocal of } \frac{\sum Q_n \left(\frac{p_o}{p_n} \right)}{\sum Q_n}$$

Where:

I = Index

p_o = Price in the base year

p_n = Price in the given year

q_o = Quantity in the base year

q_n = Quantity in the given year

Q_o = Rural retail turnover for the good in the base year

Q_n = Rural retail turnover for the good in the given or the typical year.

Appendix Tables F1 - F8 present the calculations of the price indices for 1934-37 using the formulas presented above. In Appendix Tables F1 and F2 three indices are calculated. Index 1 is that based on the available price data for 1934. Index 2 is based on the sample of goods common to all of the indices for 1934-37, and Index 3 is based on the sample common to all of the indices minus data for grain products, groats and pulses.

In Appendix Tables F3 and F4 two indices are calculated. Index 1 corresponds to Index 2 in Appendix Tables F1 and F2, and Index 2 corresponds to Index 3 in Appendix Tables F1 and F2.

In Appendix Tables F5 - F8, four indices are calculated. Index 1 is based on the total sample of 32 goods in the study. Index 2 is based on the sample of 29 goods and corresponds to Index 1 in Appendix Tables F1 and F2. Index 3 is based on the sample of goods common to all indexes and corresponds to Index 2 in Appendix Tables F1 and F2. Index 4 is based on the common sample minus grain products groats and pulses, corresponding to Index 3 in Appendix Tables F1 and F2. The index of the common sample minus grain products, groats and pulses is presented in order to give an indication of the rise in prices of manufactured goods (in the Soviet sense, which include certain foodstuffs such as sugar, salt, vodka etc.).

The index based on the common sample (including grain products, groats and pulses) has been calculated in order to provide a set of indices comparable in terms of base sample for each year. As a check on the accuracy of this index the indices based on all goods and 29 goods in 1934 and 1936-37 have also been calculated. These should provide an indication of any inaccuracies stemming from the limitations of the common sample.

Appendix Table F1

Calculation of the Price Index, 1928-34 Comparison, Base-Year Weights
(Laspeyres Formula)

Goods	1 p 34	2 p 28	3 Q 28	4 Price relative $1 \div 2$	Col 3 x Col 4
1 Rye flour (95%)	0.53	0.11	0.41	4.82	1.9762
2 Wholewheat flour (96%)	0.59	0.16	1.18	3.69	4.3542
3 Rye bread (95%)	0.74	0.10	0.06	7.40	0.4440
4 Wheat bread (80%)	1.58	0.20	0.15	7.90	1.1850
5 Ground millet, 1st sort	1.61	0.19	0.09	8.47	0.7623
6 Buckwheat groats	2.13	0.21	0.09	10.14	0.9126
7 Rice, 1-2 sort	3.59	0.56	0.09	6.41	0.5769
8 Melted butter	na	2.05	0.02	-	-
9 Sunflower oil	8.43	0.53	0.30	15.91	4.7730
10 Sugar, granulated	6.13	0.64	1.12	9.58	10.7296
11 Sugar, lump	7.13	0.72	1.12	9.90	11.0880
12 Herring, ordinary	na	0.57	0.22	-	-
13 Pike-perch	na	0.52	0.80	-	-
14 Salt	0.10	0.04	0.36	2.50	0.9000
15 Tea	29.51	6.50	0.48	4.54	2.1792
16 Vodka	5.50	1.06	1.52	5.19	7.8888
17 Cigarettes	0.35	0.14	0.41	2.50	1.0250
18 Smoking makhorka	0.48	0.07	0.58	6.86	3.9788
19 Matches	0.30	0.15	0.28	2.00	0.5600
20 Household soap	2.65	0.50	0.39	5.30	2.0670
21 Paraffin	0.65	0.12	0.59	5.42	3.1978
22 Thread	0.43	0.14	1.62	3.07	4.9734
23 Calico	1.94	0.41	1.82	4.73	8.6086
24 Coarse calico No 40	2.07	0.38	1.82	5.45	9.9190
25 Moleskin	2.79	0.69	1.82	4.04	7.3528
26 Woollen cloth	21.00	4.18	0.70	5.03	3.5210
27 Cotton socks, men's	2.28	0.53	0.37	4.30	1.5910
28 Galoshes, men's	15.00	3.60	0.28	4.17	1.1676
29 Boots, men's, black	27.67	9.29	0.13	2.98	0.3874
30 Boots, ladies'	30.00	12.01	0.13	2.50	0.3250
31 Ladies' oxfords	27.75	9.55	0.13	2.91	0.3783
32 Children's oxfords	12.00	4.80	0.13	2.50	0.3250
33 Total (1-7, 9-11, 14-32)			18.17		97.1468
34 Total (1-7, 9-11, 14-28)			17.65		95.7311
35 Total (9-11, 14-28)			15.58		85.5199
Index 1 (line 33) = $\frac{97.1468}{18.17} = 5.347$ Index 2 (line 35) = $\frac{95.7311}{17.65} = 5.424$					
Index 3 (line 35) = $\frac{85.5199}{15.58} = 5.489$					

Appendix Table F2

Calculation of the Price Index, 1928-34 Comparison, Given-Year Weights
(Paasche Formula)

Goods	1 p ₃₄	2 p ₂₈	3 Q ₃₄	4 $2 \div 1$	5 3×4
1 Rye flour (95%)	0.53	0.11	1.72	0.2076	0.3571
2 Wholewheat flour (96%)	0.59	0.16	3.75	0.2712	1.0170
3 Rye bread (95%)	0.74	0.10	0.79	0.1351	0.1067
4 Wheat bread (80%)	1.58	0.20	2.16	0.1266	0.2735
5 Ground millet, 1st sort	1.61	0.19	0.91	0.1180	0.1074
6 Buckwheat groats	2.13	0.21	0.91	0.0986	0.0897
7 Rice, 1-2 sort	3.59	0.56	0.91	0.1560	0.1420
8 Melted butter	na	2.05	0.48	-	-
9 Sunflower oil	8.43	0.53	0.57	0.0629	0.0359
10 Sugar, granulated	6.13	0.64	2.33	0.1044	0.2433
11 Sugar, lump	7.13	0.72	2.33	0.1010	0.2353
12 Herring, ordinary	na	0.57	0.46	-	-
13 Pike-perch	na	0.52	1.72	-	-
14 Salt	0.10	0.04	1.32	0.4000	0.5280
15 Tea	29.51	6.50	0.93	0.2203	0.2049
16 Vodka	5.50	1.06	38.94	0.1927	7.5037
17 Cigarettes	0.35	0.14	3.54	0.4000	1.4160
18 Smoking makhorka	0.48	0.07	1.51	0.1458	0.2202
19 Matches	0.30	0.15	0.92	0.5000	0.4600
20 Household soap	2.65	0.50	2.57	0.1887	0.4850
21 Paraffin	0.65	0.12	1.37	0.1846	0.2529
22 Thread	0.43	0.14	4.07	0.3256	1.3252
23 Calico	1.94	0.41	5.53	0.2113	1.1685
24 Coarse calico No 40	2.07	0.38	3.53	0.1836	0.6481
25 Moleskin	2.79	0.69	6.29	0.2473	1.5555
26 Woollen cloth	21.00	4.18	2.96	0.1991	0.5893
27 Cotton socks, men's	2.28	0.53	4.21	0.2325	0.9788
28 Galoshes, men's	15.00	3.60	2.57	0.2400	0.6168
29 Boots, men's, black	27.67	9.29	1.33	0.3357	0.4465
30 Boots, ladies'	30.00	12.01	1.33	0.4003	0.5324
31 Ladies' oxfords	27.75	9.55	1.33	0.3441	0.4577
32 Children's oxfords	12.00	4.80	1.33	0.4000	0.5320
33 Total (cols 1-7, 9-11, 14-32)		101.96			22.5294
34 Total (cols 1-7, 9-11, 14-28)		96.64			20.5608
35 Total (cols 9-11, 14-28)		85.49			18.4674
Index 1 (line 33) = Reciprocal of $\frac{22.5294}{101.96}$ = Reciprocal of 0.2210 = 4.525					
Index 2 (line 34) = Reciprocal of $\frac{20.5608}{96.64}$ = Reciprocal of 0.2128 = 4.700					
Index 3 (line 35) = Reciprocal of $\frac{18.4674}{85.49}$ = Reciprocal of 0.2160 = 4.630					

Appendix Table F3

Calculation of the Price Index, 1928-35 Comparison, Base-Year Weights
(Laspeyres Formula)

Goods	1 p 35	2 p 28	3 Q 28	4 Price relative (1÷2)	5 Col.3 x col.4
1 Rye flour (95%)	2.07	0.11	0.41	18.82	7.7162
2 Wholewheat flour (96%)	2.26	0.16	1.18	14.13	16.6734
3 Rye bread (95%)	0.93	0.10	0.06	9.30	0.5580
4 Wheat bread (80%)	1.86	0.20	0.15	9.30	1.3950
5 Ground millet, 1st sort	2.37	0.19	0.09	12.47	1.1223
6 Buckwheat groats	4.52	0.20	0.09	22.60	2.0340
7 Rice, 1-2 sort	7.62	0.56	0.09	13.61	1.2249
8 Melted butter	na	2.05	0.02	-	-
9 Sunflower oil	10.90	0.53	0.30	20.57	6.1710
10 Sugar, granulated	4.77	0.64	1.12	7.45	8.3440
11 Sugar, lump	5.37	0.72	1.12	7.46	8.3552
12 Herring, ordinary	na	0.57	0.22	-	-
13 Pike-perch	na	0.52	0.80	-	-
14 Salt	0.12	0.04	0.36	3.00	1.0800
15 Tea	56.69	6.50	0.48	8.72	4.1856
16 Vodka	5.50	1.06	1.52	5.19	7.8888
17 Cigarettes	0.35	0.14	0.41	2.50	1.0250
18 Smoking makhorka	0.53	0.07	0.58	7.57	4.3906
19 Matches	0.30	0.15	0.28	2.00	0.5600
20 Household soap	2.67	0.50	0.39	5.34	2.0826
21 Paraffin	0.62	0.12	0.59	5.17	3.0503
22 Thread	0.41	0.14	1.62	2.93	4.7466
23 Calico	2.35	0.41	1.82	5.73	10.4286
24 Coarse calico No 40	2.35	0.38	1.82	6.18	11.2476
25 Moleskin	3.23	0.69	1.82	4.68	8.5176
26 Woollen cloth	31.84	4.17	0.70	7.64	5.3480
27 Cotton socks, men's	2.16	0.53	0.37	4.08	1.5096
28 Galoshes, men's	15.00	3.60	0.28	4.17	1.1676
29 Boots, men's, black	na	9.28	0.13	-	-
30 Boots, ladies'	na	12.00	0.13	-	-
31 Ladies' oxfords	na	9.54	0.13	-	-
32 Children's oxfords	na	4.80	0.13	-	-
33 Total (cols 1-7, 9-11, 14-28)			17.65		120.8225
34 Total (cols 9-11, 14-28)			15.58		90.0987
Index 1 (line 33) = $\frac{120.8225}{17.65}$					6.846
Index 2 (line 34) = $\frac{90.0987}{15.58}$					5.783

Appendix Table F4

Calculation of the Price Index, 1928-35 Comparison, Given-Year Weights.
(Paasche Formula)

Goods		1 p 35	2 p 28	3 Q 35	4 2 ÷ 1	5 3 x 4
1	Rye flour (95%)	2.07	0.11	2.70	0.0531	0.1434
2	Wholewheat flour (96%)	2.26	0.16	5.75	0.0708	0.4071
3	Rye bread (95%)	0.93	0.10	9.53	0.1075	1.0245
4	Wheat bread (80%)	1.86	0.20	25.75	0.1075	2.7681
5	Ground millet, 1st sort	2.37	0.19	1.39	0.0802	0.1115
6	Buckwheat groats	4.52	0.20	1.39	0.0443	0.0616
7	Rice, 1-2 sort	7.62	0.56	1.39	0.0735	0.1022
8	Melted butter	na	2.05	0.68	-	-
9	Sunflower oil	10.90	0.53	0.80	0.0486	0.0389
10	Sugar, granulated	4.77	0.64	4.57	0.1342	0.6133
11	Sugar, lump	5.37	0.72	4.57	0.1341	0.6128
12	Herring, ordinary	na	0.57	1.17	-	-
13	Pike-perch	na	0.52	3.32	-	-
14	Salt	0.12	0.04	1.29	0.3333	0.4300
15	Tea	56.69	6.50	1.55	0.1147	0.1778
16	Vodka	5.50	1.06	37.34	0.1927	7.1954
17	Cigarettes	0.35	0.14	4.09	0.4000	1.6360
18	Smoking makhorka	0.53	0.07	2.72	0.1321	0.3593
19	Matches	0.30	0.15	1.13	0.5000	0.5650
20	Household soap	2.67	0.50	3.29	0.1873	0.6162
21	Paraffin	0.62	0.12	1.92	0.1936	0.3717
22	Thread	0.41	0.14	4.27	0.3415	1.4582
23	Calico	2.35	0.41	5.28	0.1745	0.9214
24	Coarse calico No 40	2.35	0.38	4.29	0.1617	0.6937
25	Moleskin	3.23	0.69	6.92	0.2136	1.4781
26	Woollen cloth	31.84	4.17	4.19	0.1310	0.5489
27	Cotton socks, men's	2.16	0.53	4.76	0.2454	1.1681
28	Galoshes, men's	15.00	3.60	2.97	0.2400	0.7128
29	Boots, men's, black	na	9.28	1.45	-	-
30	Boots, ladies'	na	12.00	1.45	-	-
31	Ladies' oxfords	na	9.54	1.45	-	-
32	Children's oxfords	na	4.80	1.45	-	-
33	Total (cols 1-7, 9-11, 14-28)			143.85		24.2160
34	Total (cols 9-11, 14-28)			95.95		19.5976
Index 1 (line 33) = Reciprocal of $\frac{24.2160}{143.85}$ = Reciprocal of 0.1683 = 5.941						
Index 2 (line 34) = Reciprocal of $\frac{19.5976}{95.95}$ = Reciprocal of 0.2043 = 4.895						

Appendix Table F5

Calculation of the Price Index, 1928-36 Comparison, Base-Year Weights
(Laspeyres Formula)

Goods	1	2	3	4	5
	p 36	p 28	Q 28	Price relative (1 ÷ 2)	Col.3xcol.4
1 Rye flour (95%)	1.48	0.11	0.41	13.46	5.5186
2 Wholewheat flour (96%)	1.74	0.16	1.18	10.88	12.8384
3 Rye bread (95%)	0.82	0.10	0.06	8.20	0.4920
4 Wheat bread (80%)	1.62	0.20	0.15	8.10	1.2150
5 Ground millet, 1st sort	1.98	0.19	0.09	10.42	0.9378
6 Buckwheat groats	4.19	0.20	0.09	20.95	1.8855
7 Rice, 1-2 sort	5.87	0.56	0.09	10.48	0.9432
8 Melted butter	19.53	2.05	0.02	9.53	0.1906
9 Sunflower oil	12.70	0.53	0.30	23.96	7.1880
10 Sugar, granulated	4.03	0.64	1.12	6.30	7.0560
11 Sugar, lump	4.23	0.72	1.12	5.88	6.5856
12 Herring, ordinary	5.88	0.57	0.22	10.32	2.2704
13 Pike-perch	3.72	0.52	0.80	7.15	5.7200
14 Salt	0.17	0.04	0.36	4.25	1.5300
15 Tea	80.00	6.50	0.48	12.31	5.9088
16 Vodka	5.50	1.06	1.52	5.19	7.8888
17 Cigarettes	0.35	0.14	0.41	2.50	1.0250
18 Smoking makhorka	0.42	0.07	0.58	6.00	3.4800
19 Matches	0.25	0.15	0.28	1.67	0.4676
20 Household soap	2.37	0.50	0.39	4.74	1.8486
21 Paraffin	0.65	0.12	0.59	5.42	3.1978
22 Thread	0.41	0.14	1.62	2.93	4.7466
23 Calico	2.31	0.41	1.82	5.63	10.2466
24 Coarse calico No 40	2.57	0.38	1.82	6.76	12.3032
25 Moleskin	3.69	0.69	1.82	5.35	9.7370
26 Woollen cloth	42.80	4.17	0.70	10.26	7.1820
27 Cotton socks, men's	1.92	0.53	0.37	3.62	1.3394
28 Galoshes, men's	15.11	3.60	0.28	4.20	1.1760
29 Boots, men's, black	49.31	9.28	0.13	5.31	0.6903
30 Boots, ladies'	44.86	12.00	0.13	3.74	0.4862
31 Ladies' oxfords	42.50	9.54	0.13	4.46	0.5798
32 Children's oxfords	17.46	4.80	0.13	3.64	0.4732
33 Total			19.21		127.1480
34 Total (cols 1-7, 9-11, 14-32)			18.17		118.9670
35 Total (cols 1-7, 9-11, 14-28)			17.65		116.7375
36 Total (cols 9-11, 14-28)			15.58		92.9070
Index 1 (line 33) = $\frac{127.1480}{19.21} = 6.619$ Index 2 (line 34) = $\frac{118.9670}{18.17} = 6.547$					
Index 3 (line 35) = $\frac{116.7375}{17.65} = 6.614$ Index 4 (line 36) = $\frac{92.9070}{15.58} = 5.963$					

Appendix Table F6
Calculation of the Price Index, 1928-36 Comparison, Typical-Year
Weights (1935, Paasche Formula)

Goods	1	2	3	4	5
	p 36	p 28	Q 35	2 ÷ 1	3 x 4
1 Rye flour (95%)	1.48	0.11	2.70	0.0743	0.2006
2 Wholewheat flour (96%)	1.74	0.16	5.75	0.0920	0.5290
3 Rye bread (95%)	0.82	0.10	9.53	0.1220	1.1627
4 Wheat bread (80%)	1.62	0.20	25.75	0.1235	3.1801
5 Ground millet, 1st sort	1.98	0.19	1.39	0.0960	0.1334
6 Buckwheat groats	4.19	0.20	1.39	0.0477	0.0663
7 Rice, 1-2 sort	5.87	0.56	1.39	0.0954	0.1326
8 Melted butter	19.53	2.05	0.68	0.1050	0.0714
9 Sunflower oil	12.70	0.53	0.80	0.0417	0.0334
10 Sugar, granulated	4.03	0.64	4.57	0.1588	0.7257
11 Sugar, lump	4.23	0.72	4.57	0.1702	0.7778
12 Herring, ordinary	5.88	0.57	1.17	0.0969	0.1134
13 Pike-perch	3.72	0.52	3.32	0.1398	0.4641
14 Salt	0.17	0.04	1.29	0.2353	0.3035
15 Tea	80.00	6.50	1.55	0.0813	0.1260
16 Vodka	5.50	1.06	37.34	0.1927	7.1954
17 Cigarettes	0.35	0.14	4.09	0.4000	1.6360
18 Smoking makhorka	0.42	0.07	2.72	0.1667	0.4534
19 Matches	0.25	0.15	1.13	0.6000	0.6780
20 Household soap	2.37	0.50	3.29	0.2110	0.6942
21 Paraffin	0.65	0.12	1.92	0.1846	0.3544
22 Thread	0.41	0.14	4.27	0.3415	1.4582
23 Calico	2.31	0.41	5.28	0.1775	0.9372
24 Coarse calico No 40	2.57	0.38	4.29	0.1479	0.6345
25 Moleskin	3.69	0.69	6.92	0.1870	1.2940
26 Woollen cloth	42.80	4.17	4.19	0.0974	0.4081
27 Cotton socks, men's	1.92	0.53	4.76	0.2760	1.3138
28 Galoshes, men's	15.11	3.60	2.97	0.2383	0.7078
29 Boots, men's, black	49.31	9.28	1.45	0.1882	0.2729
30 Boots, ladies'	44.86	12.00	1.45	0.2675	0.3879
31 Ladies' oxfords	42.50	9.54	1.45	0.2245	0.3255
32 Children's oxfords	17.46	4.80	1.45	0.2749	0.3986
33 Total			154.82		27.1699
34 Total (cols 1-7, 9-11, 14-32)			149.65		26.5210
35 Total (cols 1-7, 9-11, 14-28)			143.85		25.1361
36 Total (cols 9-11, 14-28)			95.95		19.7314

Index 1 (line 33) = Reciprocal of $\frac{27.1699}{154.82}$ = Reciprocal of 0.1755 = 5.698

Index 2 (line 34) = Reciprocal of $\frac{26.5210}{149.65}$ = Reciprocal of 0.1772 = 5.644

Index 3 (line 35) = Reciprocal of $\frac{25.1361}{143.85}$ = Reciprocal of 0.1747 = 5.724

Index 4 (line 36) = Reciprocal of $\frac{19.7314}{95.95}$ = Reciprocal of 0.2056 = 4.864

Appendix Table F7

Calculation of the Price Index, 1928-37 Comparison, Base-Year Weights
(Laspeyres Formula)

Goods		1	2	3	4	5
		p 37	p 28	Q 28	Price relative (1 ÷ 2)	Col.3 x col.4
1	Rye flour (95%)	1.46	0.11	0.41	13.27	5.4407
2	Wholewheat flour (96%)	1.72	0.16	1.18	10.75	12.6850
3	Rye bread (95%)	0.82	0.10	0.06	8.20	0.4920
4	Wheat bread (80%)	1.60	0.20	0.15	8.00	1.2000
5	Ground millet, 1st sort	1.97	0.19	0.09	10.37	0.9333
6	Buckwheat groats	4.18	0.20	0.09	20.90	1.8810
7	Rice, 1-2 sort	5.87	0.56	0.09	10.48	0.9432
8	Melted butter	19.53	2.05	0.02	9.53	0.1906
9	Sunflower oil	12.70	0.53	0.30	23.96	7.1880
10	Sugar, granulated	4.03	0.64	1.12	6.30	7.0560
11	Sugar, lump	4.23	0.72	1.12	5.88	6.5856
12	Herring, ordinary	5.87	0.57	0.22	10.30	2.2660
13	Pike-perch	3.71	0.52	0.80	7.14	5.7120
14	Salt	0.18	0.04	0.36	4.50	1.6200
15	Tea	80.00	6.50	0.48	12.31	5.9088
16	Vodka	5.50	1.06	1.52	5.19	7.8888
17	Cigarettes	0.35	0.14	0.41	2.50	1.0250
18	Smoking makhorka	0.35	0.07	0.58	5.00	2.9000
19	Matches	0.23	0.15	0.28	1.53	0.4284
20	Household soap	2.35	0.50	0.39	4.70	1.8330
21	Paraffin	0.72	0.12	0.59	6.00	3.5400
22	Thread	0.41	0.14	1.62	2.93	4.7466
23	Calico	2.15	0.41	1.82	5.24	9.5368
24	Coarse calico No 40	2.49	0.38	1.82	6.55	11.9210
25	Moleskin	3.75	0.69	1.82	5.44	9.9008
26	Woollen cloth	42.89	4.17	0.70	10.29	7.2030
27	Cotton socks, men's	1.85	0.53	0.37	3.49	1.2913
28	Galoshes, men's	14.30	3.60	0.28	3.97	1.1116
29	Boots, men's, black	47.35	9.28	0.13	5.10	0.6630
30	Boots, ladies'	43.33	12.00	0.13	3.61	0.4693
31	Ladies' oxfords	41.18	9.54	0.13	4.32	0.5616
32	Children's oxfords	16.96	4.80	0.13	3.53	0.4589
33	Total			19.21		125.5813
34	Total (cols 1-7, 9-11, 14-32)			18.17		117.4127
35	Total (cols 1-7, 9-11, 14-28)			17.65		115.2599
36	Total (cols 9-11, 14-28)			15.58		91.6847
Index 1 (line 33) = $\frac{125.5813}{19.21} = 6.537$				Index 2 (line 34) = $\frac{117.4127}{18.17} = 6.462$		
Index 3 (line 35) = $\frac{115.2599}{17.65} = 6.530$				Index 4 (line 36) = $\frac{91.6847}{15.58} = 5.885$		

Appendix Table F8

Calculation of the Price Index, 1928-37 Comparison, Typical-Year Weights
(1935, Paasche Formula)

Goods	$\frac{1}{p \ 37}$	$\frac{2}{p \ 28}$	$\frac{3}{Q \ 35}$	$\frac{4}{2 \div 1}$	$\frac{5}{3 \times 4}$
1 Rye flour (95%)	1.46	0.11	2.70	0.0753	0.2033
2 Wholewheat flour (96%)	1.72	0.16	5.75	0.0930	0.5348
3 Rye bread (95%)	0.82	0.10	9.53	0.1220	1.1627
4 Wheat bread (80%)	1.60	0.20	25.75	0.1250	3.2188
5 Ground millet, 1st sort	1.97	0.19	1.39	0.0965	0.1341
6 Buckwheat groats	4.18	0.20	1.39	0.0479	0.0666
7 Rice, 1-2 sort	5.87	0.56	1.39	0.0954	0.1326
8 Malted butter	19.53	2.05	0.68	0.1050	0.0714
9 Sunflower oil	12.70	0.53	0.80	0.0417	0.0334
10 Sugar, granulated	4.03	0.64	4.57	0.1588	0.7257
11 Sugar, lump	4.23	0.72	4.57	0.1702	0.7778
12 Herring, ordinary	5.88	0.57	1.17	0.0969	0.1134
13 Pike-perch	3.72	0.52	3.32	0.1398	0.4641
14 Salt	0.17	0.04	1.29	0.2353	0.3035
15 Tea	80.00	6.50	1.55	0.0813	0.1260
16 Vodka	5.50	1.06	37.34	0.1927	7.1954
17 Cigarettes	0.35	0.14	4.09	0.4000	1.6360
18 Smoking makhorka	0.35	0.07	2.72	0.2000	0.5440
19 Matches	0.23	0.15	1.13	0.6522	0.7370
20 Household soap	2.33	0.50	3.29	0.2146	0.7060
21 Paraffin	0.66	0.12	1.92	0.1818	0.3491
22 Thread	0.41	0.14	4.27	0.3415	1.4582
23 Calico	2.17	0.41	5.28	0.1889	0.9974
24 Coarse calico No 40	2.50	0.38	4.29	0.1520	0.6521
25 Moleskin	3.77	0.69	6.92	0.1830	1.2664
26 Woollen cloth	42.87	4.17	4.19	0.0973	0.4077
27 Cotton socks, men's	1.84	0.53	4.76	0.2880	1.3709
28 Galoshes, men's	14.47	3.60	2.97	0.2488	0.7389
29 Boots, men's, black	48.51	9.28	1.45	0.1913	0.2774
30 Boots, ladies'	44.06	12.00	1.45	0.2724	0.3950
31 Ladies' oxfords	41.57	9.54	1.45	0.2295	0.3328
32 Children's oxfords	17.05	4.80	1.45	0.2815	0.4082
33 Total			154.82		27.5407
34 Total (cols 1-7, 9-11, 14-32)			149.65		26.8918
35 Total (cols 1-7, 9-11, 14-28)			143.85		25.4784
36 Total (cols 9-11, 14-28)			95.95		20.0255
Index 1 (line 33) = Reciprocal of $\frac{27.5407}{154.82}$ = Reciprocal of 0.1779 = 5.621					
Index 2 (line 34) = Reciprocal of $\frac{26.8918}{149.65}$ = Reciprocal of 0.1797 = 5.564					
Index 3 (line 35) = Reciprocal of $\frac{25.4784}{143.85}$ = Reciprocal of 0.1771 = 5.647					
Index 4 (line 36) = Reciprocal of $\frac{20.0255}{95.95}$ = Reciprocal of 0.2087 = 4.792					

Notes to Appendix Tables

Column 1: Taken from column 5 of Tables 9-12

Column 2: Taken from column 5 of Table 6

Column 3: (Appendix Tables F1, F3, F5, F7):
This is column 1 of Appendix Table E1

Column 3: (Appendix Table F2):
This is column 2 of Appendix Table E1

Column 3: (Appendix Tables F4, F6, F8):
This is column 3 of Appendix Table E1

na - denotes that data was not available

APPENDIX G

Comparability of the Budget Studies Used

The starting point for the comparison is the budget data on households of collective farmers in 1934-37, because that for 1927-28 is detailed and relatively flexible and it can be adjusted to give a broad match with the limited data for the 1930s.

The main sources on the 1934-37 budgets are both works by M Nesmii:¹ They provide aggregate budget data for peasant households in a number of areas of the USSR, but no information is given on the number of households surveyed and there is no systematic list of the geographical areas covered. Nesmii does indicate, however, that the studies were made by TsUNKhU, and that the following number of areas was covered: eight oblasts in 1934, 13 oblasts in 1935 and 1936 and 28 oblasts in 1937.² The term "oblast" in this sense means an oblast, krai or republic in the USSR.

The most serious limitation of the data is the absence of a clear list of the areas of the USSR included in the studies. This precludes a detailed comparison with peasant budgets in the various regions studied in 1927-28. In an effort to find a partial solution to this problem a trawl of the sources which refer to the 1930s budget studies was made, in order to list any area mentioned as being included in the TsUNKhU data. In fact, the number of sources which came up with a geographical area was fairly limited - five to be precise. The results of the trawl are presented in Table G1. The basis for selection of the data was any clear listing of an area as being in a TsUNKhU peasant budget study in the period considered.

The most striking feature of the table is the fact that the total number of separate areas of the USSR quoted in the table is exactly 28 - the same as the most comprehensive survey which was carried out in 1937. It is most likely that these are the same 28 areas included in the 1937 study, and that this is not just a coincidence.

Consequently, it has been assumed that the 28-oblast study covered these areas, and they are listed in column 4 of Table G2.

Although the source for the budget data in 1934 cites a seven-oblast TsUNKhU study, it is assumed that these were part of the eight-oblast study of that year. Unfortunately, we have not found any other reference to the composition of the eight-oblast study conducted in 1934.

It is assumed that columns 2 and 5 of Appendix Table G1 list all of the areas included in the 1935 and 1936 13-oblast study. Partial verification for this is given by the fact that all of the areas in the seven-oblast study were covered in 1935 and 1936, which would appear logical since at this time TsUNKhU was attempting to expand the coverage of its budget studies;³ and by the fact that two of the areas covered are given in columns 3 and 4. In the case of column 4 the source says that 14 oblasts were included in the study, and of the three areas quoted only one, Uzbek SSR, was different to those listed in columns 2 and 5. It is assumed that this was the 14th area in the 14-oblast study. If this is not the case then clearly this will affect the accuracy of our outline of the coverage of the studies.

Column 6 poses something of a problem. There is no clear indication as to whether the areas listed are part of the 13-oblast study or something larger. If they were part of the 13-oblast study, then the assumption that columns 2 and 5 give all of the areas in the study, would be incorrect, because Rostov Oblast and Krasnodar Krai, both listed in column 6, were not listed in columns 2 and 5. A possible explanation is provided by column 7, which quotes a 27-oblast study for 1936, and it is likely that the two areas listed were included in this, since they were included in the 28-oblast study in 1937, according to columns 8 and 9.

Between them, columns 8 and 9 list 14 of the 28 areas included in the 1937 study. Combined with the 27-oblast data in column 7, which we assume covered 27 of the 28 areas in 1937, our coverage is extended to 25 areas. Working on the assumption that the studies in later years extended the coverage of earlier years, we shall also include the three remaining areas not listed in columns 7-9 - Leningrad Oblast, Western Oblast and Kiev Oblast. This assumption is supported by Nesmii, who indicates, by presenting comparable data, that areas covered in the 8-oblast study were included in the 13-oblast study in 1935 and that the 13 areas covered in 1935-36 were included in the 28 oblast study in 1937.⁴

It must be stressed that the assumptions made about coverage are rather tentative, and it is accepted that the evidence cited is circumstantial. With this in mind budget study comparisons between

Appendix Table G1

Comparability of Areas in the 1934-37 Budget Studies, as quoted by various sources

	1934		1935		1936		1937	
	7 oblast	13 oblast	13 oblast	14 oblast	13 oblast	27 oblast	28 oblast	28 oblast
1 Moscow Oblast	X	X			X		X	X
2 Leningrad Oblast	X	X			X			
3 Orenburg Oblast	X	X			X	X		X
4 Dnepropetrovsk Oblast		X	X	X	X	X	X	X
5 Sverdlovsk Oblast	X	X	X		X			
6 Western Oblast	X	X			X			
7 Kuibyshev Krai	X	X			X	X		
8 Western Siberian Krai	X	X			X	X		
9 Odessa Oblast		X	X	X	X	X	X	X
10 Uzbek SSR			X					
11 Voronezh Oblast		X		X	X		X	X
12 Belorussian SSR		X		X	X		X	X
13 Azov-Black Sea Krai		X			X	X		
14 Kiev Oblast		X			X			
15 Rostov Oblast								
16 Krasnodar Krai						X	X	X
17 Saratov Oblast						X	X	X
18 Turkmen SSR						X		
19 Tadzhik SSR						X		
20 Karelian ASSR						X		
21 Kirov Krai						X		
22 Kalinin Oblast						X		
23 Vinitsa Oblast						X		
24 Georgian SSR						X		
25 Armenian SSR						X		
26 Azerbaïdzhān SSR						X		
27 Kabardino-Balkar ASSR						X		
28 Volga-German ASSR							X	

'X' indicates that area has been mentioned

Notes to Appendix Table G1

Quotations from identified budget studies (except in the case of column 6) have been used as the basis for the table. The number of areas listed may not tally with the number in the budget study because, in most cases, the sources used were quoting examples for specific areas within a general total for a number of oblasts. As in previous cases "oblast" (when given as a column heading) may refer to an oblast, krai or republic.

Column 1: Quoted in S Kheinman, Rost blagosostoyaniya kolkhoznov derevni, Moscow 1939, pp 71-72. It is assumed that these are seven of the eight areas included in the 1934 budget study (see Nesmii, 1938 op.cit. p 101).

Columns 2 and 5: Quoted in UZT p 126. It seems likely that these are the 13 areas making up the 13-oblast budget study in 1935-36. They include all of the areas covered in the 7-oblast study in 1934.

Columns 3 and 8: Quoted in Nesmii, 1940, pp 55, 62, 64, 66. Nesmii verifies two of the areas quoted in the 1935 13-oblast study, and gives 10 from the 28-oblast study, only one of which, Volga-German ASSR, is not quoted by another source.

Columns 4, 6 and 9: Quoted in Nesmii *Dokhody kolkhozov...* 1938, op.cit. pp 78, 100, 104. Column 4 quotes the only reference to a 14-oblast study in 1935 that has been uncovered so far. Only Uzbek SSR is not quoted in the other sources on the 13-oblast study in 1935.

Column 7: Quoted in S Postnikov, 1937 op.cit. This source refers to a 27-oblast study in 1936 and quotes 19 of the areas studied.

Appendix Table G2
Areas Assumed to be in the 1934-37 Budget Studies

	1934 8 oblast 1	1935 13 oblast 2	1936 13 oblast 3	1937 28 oblast 4
1 Moscow Oblast	X	X	X	X
2 Leningrad Oblast	X	X	X	X
3 Orenburg Oblast	X	X	X	X
4 Sverdlovsk Oblast	X	X	X	X
5 Western Oblast	X	X	X	X
6 Kuibyshev Krai	X	X	X	X
7 West Siberian Krai	X	X	X	X
8 Dnepropetrovsk Oblast		X	X	X
9 Odessa Oblast		X	X	X
10 Voronezh Oblast		X	X	X
11 Belorussian SSR		X	X	X
12 Azov-Black Sea Krai		X	X	X
13 Kiev Oblast		X	X	X
14 Uzbek SSR				X
15 Rostov Oblast				X
16 Krasnodar Krai				X
17 Saratov Oblast				X
18 Turkmen SSR				X
19 Tadzhik SSR				X
20 Karelian ASSR				X
21 Kirov Krai				X
22 Kalinin Oblast				X
23 Vinitsa Oblast				X
24 Georgian SSR				X
25 Armenian SSR				X
26 Azerbaidzhan SSR				X
27 Kabardino-Balkar ASSR				X
28 Volga-German ASSR				X

the 1920s and the 1930s have been made both for broadly comparable areas in both periods, and also general data for the USSR (in fact the RSFSR, Ukrainian SSR and Belorussian SSR) in 1928 has also been compared with the 1934-37 figures as insurance against making a completely erroneous budget comparison on the basis of the coverage details given in Appendix Table G1.

Turning now to an assessment of the number of households included in the 1934-37 studies we are again hampered by a lack of information. Our main source, Nesmii, does not give any indication of the size of the sample. However, it is known that the 1937 data for 28 oblasts did cover 16,500 peasant households.⁵ It is also known that in 1932-33 TsUNKhU intended to survey 12,000 peasant budgets, and that 16,800 instruction booklets were printed for this purpose.⁶ (This source was the actual instruction booklet issued free-of-charge to those households participating in the study.) In 1934 11,000 instruction booklets were published.⁷ Assuming the same proportional relationship between the number of households studied to the number of booklets published as in 1932-33 (the former was 71.4% of the latter), this would imply that around 7,850 households were to be studied in 1934. In 1935 13,500 booklets were published, giving a possible total of around 9,600 budgets studied if we apply the 71.4 per cent to this figure as well.⁸ In the latter case, however, a price of R 0.13 was charged per booklet, which may have meant that a much smaller surplus of booklets was allowed for, since issuing organisations now had to sell the books and no doubt keep accounts. In this case the number of households studied may have been greater than the 9,600 listed.

Apart from this limited and, in the case of 1934-35, rather unreliable evidence, no other data on the number of budgets studied in 1934-37 has been uncovered. Taking the figure for 1937 and assuming that the 1934-5 figures give a general indication that around 7,000 or more households were probably studied in these years, then it is possible to say that the size of the sample in 1934-37 compares favourably with that for the late 1920s. For example, in 1928 7,829 households per month on average were studied by TsSU;⁹ and in our survey we shall be using data on 6072 households per month on average in 1927, and 8437 per month in 1928 (see Appendix Tables I3 and I8. For 1927 this is the total of lines 1-3, 6-8, 10, 11, 13, 14, 18-21, of

Appendix Table I8. The average per month applies to the first nine months of 1927). Thus, on the basis of evidence of the number of households studied in 1934-37, it does appear that the 1930s data is adequate. Of course, we do not know how representative of peasant households in each area the data was, and we are also assuming that most if not all of the data collected related to the budget data quoted in our sources. It may be the case, as Appendix Table G1 suggests, that households in other areas apart from the eight in 1934, 13 in 1935-36 and 28 in 1937, were studied, and that this data was not included in the overall results. If this was the case then our assessment of the adequacy of the size of the sample would probably have to be changed depending on how many areas were left out of the final figures. From an examination of Appendix Table G1, this would probably be the case for 1936, since there appear to be 13 and 27 oblast studies for this year. Unfortunately, we do not have an estimate of the number of households studied in that year so the question does appear to be academic.

It should also be borne in mind that the 1934-37 studies were confined to an examination of the budgets of the households of collective farmers, whereas data for 1927 and 1928 looked at all peasant farms. Obviously, the extent of collectivisation will have an influence on how representative the budgets of collective farm members would have been. Below, we present data on the percentage of households collectivised in the period in question:

1934	1935	1936	1937
71.4%	83.2%	90.5%	93.0%

Source: Laptev, 1939, op.cit., p 14.

We can see that throughout 1934-37 collective farm households made up the decisive majority of the total. However, in 1934 and 1935 a sizeable minority of households (28.6% and 16.8% respectively), were not collectivised and were therefore excluded from the survey. In 1936 and 1937 the number of non-collectivised households had fallen to less than 10 per cent. Thus, one can assume that in the latter period the budget data of collective farm members was similar to that for all peasant households. For 1934-35, however, this cannot be assumed, because the sizeable minority of individual farmers had incomes that were lower than those of collective farmers.¹⁰

Furthermore, their expenditure on personal consumption was lower both because they had lower incomes and because they had to purchase their own means of production. In this case the data for 1934-35 will tend to overstate the income and expenditure of peasant households when a comparison is made with 1927 and 1928. Unfortunately, we cannot compensate for this in our calculations because of the limitations of our sources.

1927-28: The data for these years is a great deal more detailed than that for 1934-37, and consequently does not pose the same kind of comparison and coverage problems. Our source for this period is the TsSU monthly journal Statisticheskoe Obozrenie, for 1927-30. The budget data was collected each month by voluntary correspondents and on average 6626 households were surveyed per month in 1927, and 7829 in 1928.¹¹ The studies concentrated on the main areas of the RSFSR, the Ukrainian SSR, Belorussian SSR, and, for most of this period, Turkmen SSR. For much of the period the data was broken down into separate oblasts, krais and republics.

The two base years listed above have been chosen because of coverage limitations in 1928. In that year the budget data for a number of areas was aggregated into consumer and producer groups, according to agricultural conditions, in March-September; see Appendix Table I2. Overall totals were given for each aggregate group, but the regional data making them up was not. This poses problems for our comparison with the 1934-37 data, since the sample of areas in 1934-36 was quite limited and, ideally, the comparison should be made with the same areas in 1928. So, to compensate for this we shall identify the consumer and producer areas covered in the 1934-37 budget data and weight the 1928 data accordingly; see Appendices H and I.

The method outlined above for dealing with the 1928 data is not an ideal solution, because it transpires that the producer and consumer areas covered many more areas than those they are being compared with in the 1930s. To provide a partial solution to this problem and also to provide a check on the accuracy of the 1928 data, it was also decided to make a comparison with the 1927 data, which is not aggregated and is highly detailed, and to adjust the totals in line with the average increase in income and expenditure in 1927 and 1928.

Appendix Table G3 presents the comparison between the total number of areas covered in 1934-37 (in fact the 1937 list, which is the maximum), and the 1927 and 1928 areas.¹²

In Appendix Table G3 column 1 lists the areas included in the 1937 budget studies. Column 2 lists the period of coverage of the corresponding area in 1927-28. This has been done because in October 1927 TsSU changed the statistical areas that it covered in its budget studies (thus, for example, Volga Raion was split between Middle Volga and Lower Volga Raions). Column 2 also gives the period of coverage if limitations in TsSU data forced changes to be made in coverage—as in the case of the Leningrad Oblast and Karelian ASSR data, which did not include November and December 1927, see line 1.

Column 3 of the table gives the general area within each statistical raion in 1927-28 which covers the oblasts studied in the 1930s budget studies. For example, Kalinin Oblast was covered by the south-west section of North-Western Raion and the north-west section of Moscow Industrial Raion between January and October 1927. This is because the oblast straddled these statistical areas. A detailed breakdown of the statistical areas making up column 3 is given in Appendix H.

As we can see from Appendix Table G3 no attempt has been made to give the precise area in the 1927-28 statistical raions which corresponds to those in 1934-37. This is because the budget data does not give breakdowns for sub-sectors of the raions. Consequently, whenever a significant portion of an area included in the 1934-37 budget studies is covered by an area in the 1927-28 studies the whole of the latter is listed. This can best be illustrated by examining Appendix Tables G4-G6, which give the composition of the 1927-28 - 1934-37 budget study comparison. Thus for example in Appendix Table G4, Kuibyshev Krai in 1934 has been assumed to be comparable with Volga Raion in January-September 1927 and Middle Volga Raion in October-December of that year. In the comparison, therefore, the total income per household in Volga and Middle Volga Raions in 1927 would be included in our totals, even though Kuibyshev Krai only covered the north-east of Volga Raion and the south of

Middle Volga Raion. It follows from this that our 1927-28 budget data will cover a much greater geographical area and larger population than that for 1934-37. Luckily, this problem is counteracted somewhat by the fact that the statistical raions in 1927-28 covered a number of the areas covered in the 1934-37 studies. For example, North Caucasus Krai covered Rostov Oblast, Krasnodar Krai, Azov-Black Sea Krai and Kabardino-Balkar ASSR in the 1937 study. Clearly, the smaller the sample in the 1934-37 budget studies the greater will be the inaccuracy in the comparison. Unfortunately, without a breakdown of the budget data either for the constituent oblasts in 1934-37 or for the constituent areas within a raion in 1927-28 the source of this inaccuracy cannot be counteracted.

Appendix Table G3

Comparability of Geographical Areas Covered by the Budget Studies, 1927-37

Area covered in 1937 budget studies		Corresponding area covered in 1927/28
1	Period of coverage 2	Corresponding area, location within it 3
1 Leningrad Oblast	Up to Oct 1927	North-Western Raion - centre and west
	Oct 1927 all 1928	Leningrad Oblast and Karelian ASSR - all of the oblast
	Nov-Dec 1927	Leningrad Oblast - all of the oblast
2 Karelian ASSR	Up to Oct 1927	Far Northern Raion - west
	Oct 1927 all 1928	Leningrad Oblast, and Karel.ASSR-north
3 Kalinin Oblast	Up to Oct 1927	North-Western Raion - south-west Moscow Industrial Raion - north-west
	Oct-Dec 1927	Leningrad Oblast - south-west Moscow Industrial Raion - north-west
	1928	Leningrad Oblast, Karel.ASSR - south-west Central Industrial Raion - north-west
4 Western Oblast	1927 and 1928	Western Raion - most of the raion
5 Moscow Oblast	1927	Moscow Industrial Raion - centre
	1928	Central Industrial Raion - centre
6 Voronezh Oblast	Up to Oct 1927	Central Agricultural Raion - centre, south
	from Oct 1927, all of 1928	Central Black-Earth Raion - centre and south
7 Sverdlovsk Oblast	1927 and 1928	Urals Oblast - south-west
8 Orenburg Oblast	Up to Oct 1927	Bashkir-Orenburg Okrug - south
	from Oct 1927, all of 1928	Middle Volga Raion - south-east
9 Kuibyshev Krai	Up to Oct 1927	Volga Raion - north-east
	from Oct 1927, all of 1928	Middle Volga Raion - south
10 Saratov Oblast	Up to Oct 1927	Volga Raion - centre and west
	from Oct 1927, all of 1928	Middle Volga Raion - south Lower Volga Raion - north
11 Volga-German ASSR	Up to Oct 1927	Volga Raion - centre
	from Oct 1927, all of 1928	Lower Volga Raion - north-east
12 Kirov Krai	Up to Oct 1927	Volga-Kama Raion - centre
	from Oct 1927, all of 1928	Vyatka Raion - centre

Appendix Table G3 (continued)

Comparability of Geographical Areas Covered by the Budget Studies 1927-37

Area covered in 1937		Corresponding area covered in 1927/28
budget studies 1	Period of coverage 2	Corresponding area, location within it 3
13 Rostov Oblast	1927 and 1928	North Caucasus Krai - north steppe
14 Krasnodar Krai	1927 and 1928	North Caucasus Krai - west steppe
15 Azov-Black Sea Krai	1927 and 1928	North Caucasus Krai - west steppe
16 Kabardino-Balkar ASSR	1927 and 1928	North Caucasus Krai - mountain area
17 Belorussian SSR	1927 and 1928	Belorussian SSR
18 Kiev Oblast	1927 and 1928	Ukrainian SSR - centre
19 Dnepropetrovsk Oblast	1927 and 1928	Ukrainian SSR - east central
20 Vinitsa Oblast	1927 and 1928	Ukrainian SSR - west
21 Odessa Oblast	1927 and 1928	Ukrainian SSR - south-west
22 Turkmen SSR	1928	Turkmen SSR
23 West Siberian Krai	1927	South-Western Siberia - south west
24 Georgian SSR		Not covered
25 Armenian SSR		Not covered
26 Azerbaidzhan SSR		Not covered
27 Tadzhik SSR		Not covered
28 Uzbek SSR		Not covered

Appendix Table G4

Composition of the 1927-1934 Budget Study Comparison (eight oblast)

1934	1927	1928
1 Leningrad Oblast	North-Western Raion (Jan-Sept) L'grad Obl., Karel. ASSR (Oct) L'grad Obl. (Nov-Dec)	L'grad Obl. Karel. ASSR (consumer area)
2 Western Oblast	Western Raion	Western Raion (consumer area)
3 Moscow Oblast	Moscow Industrial Raion	Central Industrial Raion (consumer area)
4 Sverdlovsk Oblast	Urals Oblast	Urals Oblast (producer area)
5 Orenburg Oblast	Bashkir-Orenburg Okrug (Jan-Sept) Middle Volga Raion (Oct-Dec)	Middle Volga Raion (producer area)
6 Kuibyshev Krai	Volga Raion (Jan-Sept) Middle Volga Raion (Oct-Dec)	Middle Volga Raion (producer area)
7 West Siberian Krai	South Western Siberia	Not covered

Appendix Table G5

Composition of the 1927/1935-1937 Budget Study Comparison (13 oblast)

1935/36	1927	1928
1 Leningrad Oblast	North Western Raion (Jan-Sept) L'grad Obl., Karel. ASSR (Oct) L'grad Obl. (Nov-Dec)	L'grad Obl. Karel. ASSR (consumer area)
2 Western Oblast	Western Raion	Western Raion (consumer area)
3 Moscow Oblast	Moscow Industrial Raion	Central Industrial Raion (consumer area)
4 Voronezh Oblast	Central Agricultural Raion (Jan-Sept) Central Black-Earth Raion (Oct-Dec)	Central Black-Earth Raion (producer area)
5 Sverdlovsk Oblast	Urals Oblast	Urals Oblast (producer area)
6 Orenburg Oblast	Bashkir-Orenburg Okrug (Jan-Sept) Middle Volga Raion (Oct-Dec)	Middle Volga Raion (producer area)
7 Kuibyshev Krai	Volga Raion (Jan-Sept) Middle Volga Raion (Oct-Dec)	Middle Volga Raion (producer area)
8 Azov-Black Sea Krai	North Caucasus Krai (steppe)	North Caucasus Krai
9 Belorussian SSR	Belorussian SSR	Belorussian SSR
10 Kiev Oblast	Ukrainian SSR	Ukrainian SSR
11 Dnepropetrovsk Oblast	Ukrainian SSR	Ukrainian SSR
12 Odessa Oblast	Ukrainian SSR	Ukrainian SSR
13 West Siberian Krai	South-Western Siberia	Not covered

Appendix Table G6

Composition of the 1927-1937 Budget Study Comparison (28 oblast)

1937	1927	1928
1 Leningrad Oblast	North-Western Raion (Jan-Sept) L'grad Obl.,Karel.ASSR (Oct) L'grad Obl.,(Nov-Dec)	L'grad Obl.,Karel.ASSR (consumer area)
2 Karelian ASSR	Far Northern Raion (Jan-Sept) L'grad Obl.,Karel.ASSR (Oct)	L'grad Obl.,Karel.ASSR (consumer area)
3 Kalinin Oblast	North-Western Raion (Jan-Sept) Leningrad Oblast (Oct-Dec) Moscow Industrial Raion (Oct-Dec)	L'grad Obl.,Karel.ASSR (consumer area)
4 Western Oblast	Western Raion	Western Raion (consumer area)
5 Moscow Oblast	Moscow Industrial Raion	Central Industrial Raion (consumer area)
6 Voronezh Oblast	Central Agricultural Raion (Jan-Sept) Central Black-Earth Raion (Oct-Dec)	Central Black-Earth Raion (producer area)
7 Sverdlovsk Oblast	Urals Oblast	Urals Oblast (producer area)
8 Orenburg Oblast	Bashkir-Orenburg Okrug (Jan-Sept) Middle Volga Raion (Oct-Dec)	Middle Volga Raion (producer area)
9 Kuibyshev Krai	Volga Raion (Jan-Sept) Middle Volga Raion (Oct-Dec)	Middle Volga Raion (producer area)
10 Saratov Oblast	Volga Raion (Jan-Sept) Middle Volga Raion (Oct-Dec) Lower Volga Raion (Oct-Dec)	Middle Volga Raion (producer area) Lower Volga Raion (producer area)
11 Volga-German ASSR	Volga Raion (Jan-Sept) Lower Volga Raion (Oct-Dec)	Lower Volga Raion (producer area)
12 Kirov Krai	Volga-Kama Raion (Jan-Sept) Vyatka Raion (Oct-Dec)	Vyatka Raion (consumer area)
13 Rostov Oblast	North Caucasus Krai (steppe)	North Caucasus Krai
14 Krasnodar Krai	North Caucasus Krai (steppe)	North Caucasus Krai
15 Azov-Black Sea Krai	North Caucasus Krai (steppe)	North Caucasus Krai
16 Kabardino-Balkar ASSR	North Caucasus Krai (mountain)	North Caucasus Krai
17 Belorussian SSR	Belorussian SSR	Belorussian SSR
18 Kiev Oblast	Ukrainian SSR	Ukrainian SSR

Appendix Table G6 (continued)

1937	1927	1928
19 Dnepropetrovsk Oblast	Ukrainian SSR	Ukrainian SSR
20 Vinitza Oblast	Ukrainian SSR	Ukrainian SSR
21 Odessa Oblast	Ukrainian SSR	Ukrainian SSR
22 Turkmen SSR	not covered	Turkmen SSR
23 West Siberian Krai	South-Western Siberia	not covered

FOOTNOTES

- 1 See Nesmii, 1938, op. cit. and Nesmii, 1940, op.cit.
 - 2 Nesmii, 1938, op. cit. p 101; Nesmii, 1940, p 62.
 - 3 See S Postnikov, "Izuchenie byudzhetrov kolkhoznikov v mestnykh organakh Narkhozucheta", Plan No 7, 1937 p 68.
 - 4 Nesmii 1940, op. cit. p 62.
 - 5 I Motrich, "Perestroit' metodologiyu byudzhethnykh obsledovaniy kolkhoznikov", Plan No 16, 1937, p 41.
 - 6 TsUNKhU, Byudzhety kolkhoznikov 1932-1933g., [undated] p 1.
 - 7 TsUNKhU, Byudzhety kolkhoznikov 1934g., [undated] p 1.
 - 8 TsUNKhU, Byudzhety kolkhoznikov 1935g., Moscow 1934, pl.
 - 9 Yu P Bokarev, Byudzhetye obsledovaniya krest'yanskikh khozyaistv 20-kh godov, kak istoricheskii istochnik, Moscow 1981, p 54.
 - 10 Nesmii, 1940, op.,.cit. p 64.
 - 11 Bokarev, 1981, op.cit. pp 52, 54.
 - 12 The comparisons have been made using the following sources:
O Kvitkin, "Itogi perepisi 1926g.", SO No 2, 1927, pp 23-28;
"Izmeneniya v administrativno-territorial'nom sostave SSSR s 1 iyulya 1926 goda po 1 maya 1927 goda", SO No 9, 1927, pp 90-95;
"Izmeneniya v administrativno-territorial'nom sostave Soyuza SSR za 1928 god", SO No 2, 1929, pp 118-22;
S S Balzak, V F Vasyutin and Ya, G Feigin, Economic Geography of the USSR, New York, 1949; N Mikhaylov, Soviet Geography, London, 1937; F Lorimer, The Population of the Soviet Union: History and Prospects, Geneva, 1946; "Novye ekonomicheskie raiony SSSR", SO No 8, 1927, pp 98-103
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APPENDIX H

Regional Weights Used in the 1927-28 Budget Studies

In this appendix we present the regional weights used to obtain the average data on peasant budgets in 1927-28. In both the 1927 and 1928 calculations the average number of peasant households in the areas studied has been used. Appendix Tables H1 and H2 present the relevant data for each year. Wherever possible official estimates of the number of households in the corresponding areas have been used. In other cases population data for 1/1/28 has been made the basis for calculations, or, where the 1928 data does not provide sufficient detail, the census of December 1926 has been used.

Appendix Table H1

Estimates of Number of Peasant Households, Selected Areas of the USSR, 1927
(thousands)

Raion	Households
1 Far Northern	148.6
2 Northern	320.4
3 North-Western	853.6
4 Leningrad Oblast and Karel. ASSR	899.5
5 Leningrad Oblast	856.3
6 Western	748.8
7 Moscow Industrial	2291.2
8 Central Agricultural	2421.8
9 Central Black-earth	2012.5
10 Urals Oblast	1240.3
11 Bashkir-Orenburg Okrug	638.2
12 Bashkir ASSR	507.4
13 Volga	948.1
14 Volga-Kama	1310.5
15 Vyatka	608.6
16 Middle Volga	1198.8
17 Lower Volga	957.3
18 North Caucasus Krai: a) Steppe area	1060.9
b) Mountain area	248.8
19 South-Western Siberia	849.5
20 Belorussian SSR	796.6
21 Ukrainian SSR	5110.7

Notes

Composition of the areas listed below is based on "Novye ekonomicheskies raiony SSSR", 1927, op.cit., pp 98-103, unless otherwise stated.

1 Far Northern Raion: Up to October 1927 this area covered

Arkhangel and Murmansk Guberniyas and Karelian ASSR and Komi Autonomous Oblast. On 17 December 1926 the rural population of the raion was 743 thousand people.¹ Assuming 5.0 people per household the average in the expanded Northern Raion in 1927, we obtain 149 thousand households.² The number of households in the expanded Northern Raion increased by 3.8 per cent between 1926 and 1927,³ so no adjustment to the December 1926 data has been made, because it is assumed that it will be fairly close to that for 1927.

2 Northern Raion: Up to October 1927 this area covered Vologda

and Severo-Dvina Guberniyas. The total rural population of the raion on December 1926 was 1602 thousand people.⁴ As in the case of Far Northern Raion, we assume an average of 5.0 people per household. Dividing 1602 thousand by 5.0 gives 320.4 thousand households, as an estimate of the number in the raion in December 1926. Again, no adjustment in the figure has been made to take account of the different time periods covered, because it is assumed that the December 1926 figure would have been quite close to that of 1927, since the increase of the population in areas which comprised Northern Raion was not very great.

3 North-Western Raion: Up to October 1927 this area consisted

of Leningrad, Cherepovets, Pskov and Novgorod Guberniyas. In December 1926 the rural population of the areas comprising North-Western Raion was 4130 thousand people, and that for the later Leningrad Oblast and Karelian ASSR (see below for composition), was 4,350 thousand people - ie the former accounted for 94.9 per cent of the latter. To get a rough estimate of the number of households in the raion we shall take 94.9 per cent of the households in Leningrad Oblast and Karelian ASSR in 1927 (899.5 thousand),⁵ which gives 853.6 thousand.

4 Leningrad Oblast and Karelian ASSR: This is the new economic raion, roughly equivalent to North-Western Raion, adopted in the TsSU statistics from October 1927. It comprised the former

North-Western Raion plus Karelian ASSR and Murmansk Guberniya. Data on the number of peasant households is from SSS-28 and is the average for 1927.⁶

5 Leningrad Oblast: The area in line 4 but without Karelian SSR.

6 Western Raion: Smolensk and Bryansk Guberniyas. Data is for the average number of households in 1927.⁷

7 Moscow Industrial Raion: This covered Vladimir, Ivanovo-Voznesensk, Kaluga, Kostroma, Moscow, Nizhegorod, Tver and Yaroslavl Guberniyas, up to October 1927. From October 1927 the Central Industrial Raion was quoted, which included the above plus Ryazan and Tula Guberniyas. Data for the Moscow Industrial Sub-Raion, which covered the same area as Moscow Industrial Raion, was quoted for October-December 1927. There were 3046.8 thousand peasant households in Central Industrial Raion in 1927.⁸ The total rural population of Central Industrial Raion on 1/1/28 was 14,410 thousand, and that for Ryazan and Tula Guberniyas - 3,570.7 thousand (24.8 per cent of the total).⁹ Assuming a constant number of persons per household throughout the raion, we can obtain a rough approximation of the number of households in the former Moscow Industrial Raion by taking 75.2 per cent of those in the Central Industrial Raion - ie 2291.2 thousand.

8 Central Agricultural Raion: In operation up to October 1927 this comprised the later Central Black-Earth Raion - Orlov, Tambov, Kursk and Voronezh Guberniyas - with 2012.5 thousand peasant households in 1927, and Penza Guberniya.¹⁰ The rural population of Penza Guberniya on 1/1/28 was 2033.5 thousand, and that for Central Black-Earth Oblast - 9978.8 thousand - giving a total of 12012.1 thousand.¹¹ Given that the rural population of Central Black-Earth Oblast was 83.1 per cent of this total, and assuming a constant number of persons per household throughout the raion, we can make a rough approximation of the number of households in the Central Agricultural Raion in 1927 by dividing 2012.5 thousand by 0.831 - ie., 2421.8 thousand. It is accepted that since this calculation is based on data for 1927 and January 1928 the result can only be a rough approximation.

- 9 Central Black Earth Raion: See section 6 above.
- 10 Urals Oblast: In 1927 the oblast comprised the Pre-Ural, Mining-Industrial and Trans-Ural sub-regions. In October 1927 Tobol'sk Okrug was split from the Trans-Ural sub-region and the Tobol'sk Northern Okrug was created. It is assumed that the oblast as a whole was left largely unchanged throughout 1927. The figure is for the average number of households in 1927.¹²
- 11 Bashkir-Orenburg Okrug: Comprising Bashkir ASSR and Orenburg Guberniya, the rural population of the two areas on 1/1/28 was 3164.4 thousand.¹³ Bashkir Raion accounted for 79.5 per cent of the total. In 1927 there were 507.4 thousand peasant households in the Bashkir ASSR. Assuming that the number of persons per household was constant in both areas we can obtain a rough approximation of the total number of peasant households in both areas by dividing 607.4 thousand by 0.795, giving a rough figure of 638.2 thousand. Data for Bashkir-Orenburg Okrug was given for January-September 1927. From October onwards only Bashkir ASSR was quoted and Orenburg Guberniya was included in Middle Volga Raion.
- 12 Bashkir ASSR: See section 11 above
- 13 Volga Raion: Up to October 1927 this comprised Ul'yanovsk, Samara, Saratov and Stalingrad Guberniyas and the Volga-German ASSR. In October 1927 the raion was incorporated into the Middle and Lower Volga Raions. In 1927 the total number of peasant households in Middle Volga Raion and Lower Volga Krai (without Tatar and Chuvash ASSRs) was 1454.2 thousand households, and on 1/1/28 the total rural population of the corresponding areas was 10735.6 thousand.¹⁴ Out of this the total rural population of Ul'yanovsk, Samara, Saratov and Stalingrad Guberniyas and Volga-German ASSR was 7000 thousand - ie 65.2 per cent of the total. Assuming a constant number of persons per peasant household throughout the area we obtain a rough estimate of the number of households in the former Volga Raion of 948.1 thousand, by taking 65.2 per cent of the 1454.2 thousand households listed above.
- 14 Volga-Kama Raion: Up to October 1927 this comprised the later Vyatka Raion (Vyatka Guberniya, Votyak Autonomous Oblast and Marii Autonomous Oblast), with a total number of 608.6 thousand

peasant households in 1927, and the Tatar and Chuvash ASSRs-total population of 701.9 thousand peasant households - giving a total number of peasant households of 1310.5 thousand.¹⁵

15 Vyatka Raion: In operation from October 1927. Population data is the average for 1927.¹⁶

16 Middle Volga Raion: In operation from October 1927, it comprised the Chuvash and Tatar ASSRs, Penza, Ul'yanovsk, Samara and Orenburg Guberniyas. Population data is average for 1927.¹⁷

17 Lower Volga Raion: In operation from October 1927. The raion consisted of Saratov, Stalingrad and Astrakhan Guberniyas, the Volga-German ASSR, and the Kalmyk Autonomous Oblast. The number of peasant households is the average for 1927.

18 North Caucasus Krai: Up to October 1927 the steppe area of the krai consisted of: Donets, Shakhtinsk, Taganrog, Don, Sal'sk, Stavropol, Kuban, Maikop, Armavir, Black Sea, and Ter Okrugs, and the Adygei Autonomous Oblast. The autonomous oblasts, which appear to be largely synonymous with the mountain area of the krai, were: Cherkess, Karachae, Kabardino-Balkar, Osetian, Ingush and Chechen Autonomous Oblasts. The Sunzhen Autonomous Okrug was also included in the list of autonomous oblasts. It is assumed that this was not included in the mountain area. In October 1927 the statistics were rearranged in the following order: The Azov-Steppe sub-raion, which included Don and Taganrog Okrugs; the Eastern Steppe sub-raion, which was composed of Donets, Shakht-Donets, Sal'sk, Ter, Stavropol and Sunzhen Okrugs; the Kuban-Black Sea sub-raion, consisting of Kuban, Armavir, Maikop and Black Sea Okrugs, and Adygei-Cherkess Autonomous Oblast; and the Mountain sub-raion, composed of the Karachae, Kabardino-Balkar, North Osetian, Ingush and Chechen Autonomous Oblasts, Cherkess National Okrug, and Vladikavkaz and Grozny autonomous cities. It appears from an examination of maps before and after the changes in raions, that the administrative division of the steppe and mountain areas of the krai remained roughly similar.¹⁸ Also the TsSU statistics did not change their sub-division of the krai or indicate any change in their composition. Thus, it has been assumed that changes were mainly made in name only and that the areas referred to before and after the change in TsSU statistics are roughly comparable.

In 1927 there were 1309.7 thousand peasant households in North Caucasus Krai¹⁹. In their examination of budget data in 1926/27 TsSU weighted the data for the krai at 81 per cent for the steppe area and 19 per cent for the mountain area.²⁰ Using the same weighting for the total number of peasant households in the krai we obtain: 1060.9 thousand households in the steppe area, and 248.8 thousand in the mountain area.

19 South-Western Siberia: Data is the average for 1927. The area was composed of Omsk, Tarsk, Slavgorod, Barabinsk, Lower Siberian, Kamensk, Barnaul, Biisk, Rubtsovsk Okrugs and Oirat Autonomous Oblast. It appears that the same geographical area was referred to throughout 1927.

20 Belorussian SSR: Figures refer to the average for 1927.²¹ It appears that the same geographical area was referred to throughout 1927.

21 Ukrainian SSR: Data is the average for 1927.²² It appears that the same geographical area was referred to throughout 1927.

Appendix Table H2

Estimates of Number of Peasant Households, Selected Areas of the USSR, 1928
(thousands)

Raion	Households
1 North-Eastern	451.7
2 Leningrad Oblast and Karel.ASSR	905.2
3 Western	757.4
4 Central Industrial	3028.6
5 Vyatka	617.3
6 Consumer areas (1-5)	5760.2
7 Central Black-Earth	2109.4
8 Urals Oblast	1264.0
9 Bashkir ASSR	512.0
10 Middle Volga	1296.4
11 Lower Volga Krai	960.2
12 Crimean ASSR	89.7
13 Producer areas (7-12)	6231.7
14 North Caucasus Krai	1394.4
15 Belorussian SSR	803.0
16 Ukrainian SSR	5173.8
17 Turkmen SSR	187.1

Notes

Composition of the areas listed below is based on SO No 8, 1927, pp 98-103, unless otherwise stated.

- 1 North-Eastern Raion: Composed of Arkhangel, Vologda and Severo-Dvina Guberniyas, and Komi Autonomous Oblast. According to SSS-28²³ there were 451.2 thousand peasant households in Northern Raion in 1928. It appears that this Northern Raion covered the same area as North-Eastern Raion.²⁴ In 1928 minor changes were made to the internal composition of Severo-Dvina Guberniya.²⁵ Data refers to the average number of peasant households in 1928.²⁶
- 2 Leningrad Oblast and Karelian SSR: See section 4 of Notes to Appendix Table H1 for a description of the area covered by this raion. In late 1928 internal administrative changes (unlisted) were made within Leningrad Oblast.²⁷ Data is for the average number of peasant households in 1928.²⁸
- 3 Western Raion: See Section 6 of Notes to Appendix Table H1 for a general description of the area covered by this raion. In August 1928 minor administrative changes were made within Smolensk Guberniya. In October two sel'sovets were transferred from Orlov Okrug, Central Black-Earth Oblast, to Bryansk Guberniya, and two villages were transferred from the Guberniya to Ukrainian SSR.²⁹ It is believed that these changes will not materially affect our figures. Data is for the average number of peasant households in 1928.³⁰
- 4 Central Industrial Raion: See section 5 of Notes to Appendix Table H1 for a list of the areas covered from October 1927. Minor changes to the guberniyas included in this raion were made in 1928. In July one uezd was transferred from Ryazan Guberniya to Central Black-Earth Oblast, and two raiony were also transferred to the oblast from Tula Guberniya. In October minor adjustments were made between Moscow and Vladimir Guberniyas. Rearrangements within Kaluga and Nizhegorod Guberniyas were also made in March, June, September and November.³¹ It is believed that these changes were of a relatively minor nature and will not materially affect our results. Data quoted refers to the average number of peasant households in 1928.³²

5 Vyatka Raion: Composed of Vyatka Guberniya, and the Votyak and Marii Autonomous Oblasts. Minor changes were made to the internal composition of Vyatka Guberniya in January 1928.³³ It is believed that this change will have no material effect upon our budget data.

Figures refer to the number of peasant households in the raion on average in 1928.³⁴

6 Consumer areas: Up to October 1927 this comprised Far North Raion, Northern Raion, North-Western Raion, Western Raion and Moscow Industrial Raion.³⁵ In 1928, however, the TsSU budget studies listed the following raions as comprising the consumer area: North-Eastern Raion, Leningrad Oblast and Karelian ASSR, Western Raion, Central Industrial Raion, and Vyatka Raion. The main difference between the two is the inclusion of Vyatka Raion (formerly part of Volga-Kama Raion), in the consumer areas in 1928.

7 Central Black-Earth Raion: See section 6 of Notes to Appendix Table H1 for a list of areas included in this raion. In July 1928 Central Black Earth Oblast (which was covered by Central Black-Earth Raion) received one uezd from Ryazan Guberniya and two raiony were transferred to the oblast from Tula Guberniya, and in October one sel'sovet from Tambov Okrug of Central Black-Earth Oblast was transferred to Lower Volga Krai, and two sel'sovets were transferred from Orlov Okrug to Bryansk Guberniya. It is believed that these minor changes will not materially affect our results. Data quoted is the average for 1928 of the number of peasant households in Central Black-Earth Oblast in 1928.³⁶

8 Urals Oblast: See section 10 of Notes to Appendix Table H1 for a list of the areas covered by the oblast. Data quoted refers to the average number of peasant households in 1928.³⁷

9 Bashkir ASSR: Data quoted refers to the average number of peasant households in 1928.³⁸

10 Middle Volga Raion: The area covered consisted of Orenburg, Penza, Samara and Ul'yanovsk Guberniyas and Tatar and Chuvash ASSRs. In 1928 Middle Volga Oblast was created, consisting of the guberniyas listed above, but minus parts of Pugachev uezd in Samara Guberniya, and plus parts of three uezds from Saratov Guberniya.³⁹ In December the village of Novaya Ishina was transferred from Tatar

ASSR to Chuvash ASSR.⁴⁰ It is believed that these changes will not materially affect our results.

Data quoted is for the average number of peasant households in 1928 in the raion, including Tatar and Chuvash ASSRs.⁴¹

11 Lower Volga Krai: This consisted of Saratov, Stalingrad and Astrakhan Guberniyas, Volga-German ASSR and Kalmyk Autonomous Oblast. In 1928 parts of three uyezds of Saratov Guberniya were transferred to Middle Volga Oblast, and after the creation of Lower Volga Krai, 21 volosts from Pugachev Uezd, Samara Guberniya, were transferred to Lower Volga Krai. These are minor changes which, it is believed, will not affect our data.

Data quoted is for the average number of peasant households in 1928 in Lower Volga Krai.⁴²

12 Crimean ASSR: Data quoted refers to the average number of peasant households in 1928.⁴³

13 Producer areas: Up to October 1928 these comprised Ryazan-Tula Raion, Central Agricultural Raion, Volga-Kama Raion, Urals, Oblast, Bashkir-Orenburg Okrug, Volga Raion, Lower Volga and Crimean ASSR. From October 1927 and in 1928 the areas covered were Central Black-Earth Raion, Urals Oblast, Bashkir ASSR, Middle Volga, Lower Volga and Crimean ASSR. The difference between the two was the exclusion of Ryazan-Tula Raion and Vyatka Raion from the producer areas from October 1928.

14 North Caucasus Krai: See section 8 of Notes to Appendix Table H1 for a list of the areas covered from October 1927 onwards. Minor internal changes, not affecting the area covered by the raion, were made in 1928. Data provided is for the average number of peasant households in 1928.⁴⁴

15 Belorussian SSR: Data refers to the average number of peasant households in 1928.⁴⁵

16 Ukrainian SSR: In October two settlements from Sevsk Uezd, Bryansk Guberniya, three settlements from Belgorod Uezd, and eight settlements from Graivoron Uezd, Kursk Guberniya, were transferred to the Ukrainian SSR.⁴⁶ It is believed that these changes will not materially affect our results.

Data quoted refers to the average number of peasant households in 1928.⁴⁷

17 Turkmen SSR: Data refers to the average number of peasant households in 1928.⁴⁸ It is believed that there were no major changes in the geographical area covered by Turkmen SSR in 1928.⁴⁹

FOOTNOTES

- 1 SSS- 27 p 2.
- 2 SSS-28 pp 20-21, 82.
- 3 SSS-28 pp 82-83.
- 4 SSS-27 loc. cit.
- 5 SSS-27 loc. cit. SSS-28 loc. cit.
- 6 SSS-28 loc. cit.
- 7 SSS-28 loc. cit.
- 8 SSS-28 loc. cit.
- 9 SSS-28 pp 20-21, 82-83.
- 10 SSS-28 pp 82-83.
- 11 SSS-28 pp 20-21, 24-25.
- 12 SSS-28 pp 82-83.
- 13 SSS-28 pp 24-25.
- 14 SSS-28 pp 24-25, 82-83.
- 15 SSS-28 pp 82-83.
- 16 SSS-28 loc. cit. see section 12 above for breakdown of areas.
- 17 SSS-28 loc. cit.
- 18 See "Novye ekonomicheskie raiony SSSR", 1927, op.cit. p 103,
and Balzak, Vasyutin and Feigin, 1949 op.cit. figure 82.
- 19 SSS-28. loc. cit.
- 20 P Gladilin, "Priobretenie promyshlennykh tovarov sel'skim
naseleniem v 1926/27g.", SO No 7, 1929, pp 3-4.
- 21 SSS-28 loc. cit.
- 22 SSS-28 loc.cit.
- 23 SSS-28 p 82.
- 24 See Izmeneniya v administrativno-territorial'nom sostave
Soyuza SSR za 1928 god, 1929, op.cit. p 120.
- 25 SO No 2, 1929, loc. cit.
- 26 SSS-28 pp 82-83.
- 27 SO No 2, 1929, p 122.
- 28 SSS-28 loc. cit.
- 29 SO No 2, 1929, p 120.

- 30 SSS-28 loc.cit.
 - 31 SO No 2, 1929, pp 120-122.
 - 32 SSS-28 loc. cit.
 - 33 SO No 2, 1929, p 120.
 - 34 SSS-28 loc. cit.
 - 35 SO No 8, 1927, pp 98-99.
 - 36 SO No 2, 1929, loc. cit.
 - 37 SSS-28 loc. cit.
 - 38 SSS-28 loc. cit.
 - 39 SO No 2, 1929, p 119.
 - 40 SO No 2, 1929, p 120.
 - 41 SSS-28 loc. cit.
 - 42 SSS-28 loc. cit.
 - 43 SSS-28 loc. cit.
 - 44 SSS-28 loc. cit.
 - 45 SSS-28 loc. cit.
 - 46 SO No 2, 1929, p 120.
 - 47 SSS-28 loc. cit.
 - 48 SSS-28 loc. cit
 - 49 See SO No 2, 1929, pp 118-122.
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APPENDIX I

Peasant Budget Data, 1927-28

Table I1 presents the income and expenditure of peasant households in 1928, using the TsSU budget studies. In this case all of the areas of the RSFSR that were studied, plus the Ukrainian and Belorussian SSRs are included. It is assumed that the areas of the RSFSR referred to are: North-Eastern Raion, Leningrad Oblast and Karelian ASSR, Western Raion, Moscow-Industrial and Ryazan-Tula sub-raions, Central Black-Earth Raion, Vyatka Raion, Urals Oblast, Bashkir ASSR, Middle and Lower Volga Raions, Crimean ASSR, North Caucasus Krai, Siberian Krai, Buryat-Mongolian ASSR, Far-Eastern Krai.

Since the table includes all of the areas studied by TsSU in this period the coverage is much greater than that for 1934-37. From Table G6 we can see that North-Eastern Raion, Bashkir ASSR, Crimean ASSR, Buryat-Mongolian ASSR and Far-Eastern Krai were not covered in the most comprehensive of the studies in the mid-1930s - that for 1937. As a result this data will not give a direct comparison with the 1930s studies. Nevertheless, it is useful as an indicator of the general income and expenditure patterns of most of the USSR and as such it has been included in our study.

Using the comparisons between the 1927-28/1934-37 budget studies presented in Appendix G and the weights in Appendix H, we can now compute the comparable budgets for 1928 in the first instance. Appendix Table I2 presents the TsSU monthly budget data for all of the areas in 1928 which cover those in the 1934-37 TsUNKhU budget studies. Table I3 uses the data presented in Table I2 to give total annual income and expenditure for 1928.

As has already been explained, because the studies in the 1920s covered large geographical areas it has not been possible to give an exact comparison with the areas listed for 1934-37. Instead, whenever an area in the 1934-37 studies falls within one of the larger statistical raions used in the 1928 (and 1927) study then all of the latter has been included. Thus, for example, all of the Urals Oblast budget data has been included in 1928, even though we know that Sverdlovsk Oblast,

Appendix Table I 1

Total Income and Expenditure of Peasant Households, 1928

(rubles/households, all-area data)

	Total income	Total expenditure	flour and groats	of which manufactured goods
1 January	40.12	41.61	2.23	15.11
2 February	40.10	41.23	2.46	14.64
3 March	42.43	42.83	2.68	15.81
4 April	36.67	36.41	2.61	14.59
5 May	37.29	36.92	2.69	13.87
6 June	37.96	37.38	2.72	15.93
7 July	37.57	36.57	2.81	16.03
8 August	37.63	35.64	1.87	16.02
9 September	44.68	44.57	1.58	16.59
10 October	56.49	55.71	1.28	21.48
11 November	50.16	51.83	1.39	19.06
12 December	52.97	51.42	1.54	20.38
13 Total	514.52	512.12	25.86	199.51

Sources: January - SO No 3, 1929, p 141; February - SO No 4, 1929, p 138;
 March - SO No 5, 1929, p 134; April - SO No 6, 1929, p139;
 May - SO No 7, 1929, p 139; June - SO No 8, 1929, p129; July -
SO No 9, 1929, p 105; August - SO No 10, 1929, p 122;
 September - SO No 11, 1929, p 140; October and November -
SO No 12, 1929, p 107; December - SO No 1, 1930, p 129.

Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions

January February

	Households studied	Total income	Total expenditure	of which		Households studied	Total income	Total expenditure	of which	
				flour and groats	manufact. goods				flour and groats	manufact. goods
1 North-Eastern	225	40.30	41.89	2.48	17.02	243	40.11	40.40	3.51	18.26
2 L'grad Oblast, Karel.ASSR	395	43.07	40.82	5.20	15.48	407	42.94	42.88	7.58	15.27
3 Western	170	26.09	28.41	2.87	9.84	178	30.46	33.27	2.94	11.51
4 Central Industrial	947	54.32	55.53	4.95	21.98	947	52.15	52.20	5.59	21.32
5 Vyatka	239	37.05	38.33	1.26	16.15	277	40.62	37.60	2.22	16.65
6 Consumer areas (1-5)	1976	45.89	46.74	4.13	18.35	2052	45.67	45.76	5.03	18.34
7 Central Black-Earth	434	31.58	35.01	1.37	14.05	454	36.05	38.64	1.07	13.22
8 Urals Oblast	556	41.85	44.03	2.97	12.44	532	42.67	43.87	3.17	14.17
9 Bashkir ASSR	81	29.04	31.38	4.01	11.62	103	25.50	29.27	1.94	8.77
10 Middle Volga	247	35.16	37.95	1.64	16.05	288	31.27	32.76	2.11	14.95
11 Lower Volga	197	37.94	38.81	1.79	16.35	237	38.16	39.36	1.84	15.70
12 Crimean ASSR	85	50.63	50.56	3.72	17.99	88	42.19	43.34	0.97	14.32
13 Producer areas (7-12)	1600	35.45	37.96	2.07	14.35	1702	35.95	37.89	1.90	13.81
14 North Caucasus Krai	488	60.62	60.84	2.05	21.90	488	55.16	57.19	2.11	18.83
15 Belorussian SSR	285	24.70	25.50	1.34	8.05	253	25.94	25.90	1.31	8.89
16 Ukrainian SSR	3118	37.40	38.25	0.81	12.15	3253	37.62	31.09	0.63	10.57
17 Turkmen SSR	35	84.18	108.57	11.10	35.86	30	57.82	75.38	10.39	30.82

Appendix Table I 2 (continued)

Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions	March				April			
	Households studied	Total income	Total expenditure	of which flour and groats	of which manufact. goods	Households studied	Total income	Total expenditure
1 North-Eastern								
2 L'grad Oblast, Karel.ASSR								
3 Western								
4 Central Industrial								
5 Vyatka								
6 Consumer areas (1-5)	2141	52.73	53.83	5.73	20.66	2092	45.64	44.68
7 Central Black-Earth							4.64	17.92
8 Urals Oblast								
9 Bashkir ASSR								
10 Middle Volga								
11 Lower Volga								
12 Crimean ASSR								
13 Producer areas (7-12)	1814	38.59	39.16	1.78	14.03	1747	32.00	31.91
14 North Caucasus Krai	461	49.20	49.26	1.73	18.36	397	51.53	48.00
15 Belorussian SSR	268	26.56	25.75	2.60	8.31	271	20.72	21.91
16 Ukrainian SSR	3243	36.28	36.37	0.87	12.93	3609	34.77	35.59
17 Turkmen SSR	33	147.59	121.50	9.13	30.32	35	74.45	80.21
							2.09	12.60
							1.67	20.10
							2.89	7.30
							1.32	15.72
							7.01	23.91

Appendix Table I 2 (continued)

Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions	May				June			
	Households studied	Total income	Total expenditure	of which flour and groats	Households studied	Total income	Total expenditure	of which flour and groats
1 North-Eastern								
2 L'grad Oblast, Karel.ASSR								
3 Western								
4 Central Industrial								
5 Vyatka								
6 Consumer areas (1-5)	2101	44.92	45.05	4.79	2182	42.65	42.93	4.43
7 Central Black-Earth								
8 Urals Oblast								
9 Bashkir ASSR								
10 Middle Volga								
11 Lower Volga								
12 Crimean ASSR								
13 Producer areas (7-12)	1929	33.81	32.28	2.86	1850	35.37	34.85	2.48
14 North Caucasus Krai	436	49.98	48.49	2.44	349	52.18	51.40	2.65
15 Belorussian SSR	229	21.34	21.60	1.62	245	21.32	20.93	2.62
16 Ukrainian SSR	2516	33.47	32.42	0.83	2516	34.47	33.72	0.99
17 Turkmen SSR	28	71.69	82.17	6.97	41	52.78	40.51	4.50
								21.12

Appendix Table I 2 (continued)

Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions	July				August			
	Households studied	Total income	Total expenditure	of which flour and groats	Households studied	Total income	Total expenditure	of which flour and groats
1 North-Eastern								
2 L'grad Oblast, Karel.ASSR								
3 Western								
4 Central Industrial								
5 Vyatka								
6 Consumer areas (1-5)	2041	41.44	40.21	4.12	2177	40.48	40.46	3.19
7 Central Black-Earth								18.76
8 Urals Oblast								
9 Bashkir ASSR								
10 Middle Volga								
11 Lower Volga								
12 Crimean ASSR								
13 Producer areas (7-12)	1696	36.22	35.34	2.94	1382	37.04	34.24	1.56
14 North Caucasus Krai	331	53.52	49.62	2.14	263	64.20	62.32	2.11
15 Belorussian SSR	217	22.30	20.14	2.33	253	19.42	17.96	1.04
16 Ukrainian SSR	3043	32.57	32.73	1.19	2789	31.71	30.93	0.57
17 Turkmen SSR	32	67.51	55.42	4.99	18	31.03	32.26	1.21
								16.86

Appendix Table I 2 (continued)

Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions	September				October			
	Households studied	Total income	Total expenditure	of which flour and groats	Households studied	Total income	Total expenditure	of which flour and groats
1 North-Eastern	181				181	34.13	36.27	1.30
2 L'grad Oblast, Karel.ASSR	365				365	40.92	40.68	1.63
3 Western	205				205	38.29	35.09	1.93
4 Central Industrial	975				975	67.28	64.39	2.83
5 Vyatka	252				252	32.95	34.11	0.43
6 Consumer areas (1-5)	2053	42.13	40.96	1.79	1978	53.05	51.36	2.15
7 Central Black-Earth	390				390	45.46	45.53	0.72
8 Urals Oblast	486				486	49.63	47.05	1.77
9 Bashkir ASSR	135				135	46.99	41.34	3.36
10 Middle Volga	311				311	51.02	49.28	1.12
11 Lower Volga	156				156	80.69	85.63	2.73
12 Crimean ASSR	98				98	72.45	86.78	3.71
13 Producer areas (7-12)	1460	42.83	42.42	1.41	1576	53.40	53.05	1.59
14 North Caucasus Krai	255	97.71	94.33	5.11	275	88.58	96.31	4.85
15 Belorussian SSR	240	27.07	24.97	0.43	288	28.06	26.51	0.71
16 Ukrainian SSR	2800	42.07	43.24	0.69	2965	45.25	43.28	0.86
17 Turkmen SSR	31	37.97	45.61	1.56	33	78.61	62.42	4.31
								24.74

Appendix Table I2 (continued)

Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions	November				December			
	Households studied	Total income	Total expenditure	of which flour and groats	Households studied	Total income	Total expenditure	of which flour and groats
1 North-Eastern	250	44.50	42.76	1.45	241	48.39	46.21	2.60
2 L'grad Oblast, Karel.ASSR	390	42.10	43.42	2.03	358	49.07	47.86	3.07
3 Western	185	40.46	43.51	1.61	216	43.35	41.94	2.76
4 Central Industrial	1012	59.47	62.04	2.96	998	65.94	64.68	3.72
5 Vyatka	263	33.27	32.55	0.54	243	43.72	41.63	0.81
6 Consumer areas (1-5)	2100	50.26	52.01	2.26	2056	56.56	55.13	3.09
7 Central Black-Earth	454	37.01	40.85	1.17	538	41.53	41.78	1.06
8 Urals Oblast	540	55.62	55.91	2.75	546	58.13	59.59	6.07
9 Bashkir ASSR	129	33.13	35.98	1.16	130	43.62	39.97	1.85
10 Middle Volga	336	38.59	39.78	0.99	354	38.69	38.16	1.33
11 Lower Volga	207	42.91	48.25	2.30	249	50.99	46.39	2.28
12 Crimean ASSR	94	67.50	74.92	7.42	111	64.52	46.36	4.82
13 Producer areas (7-12)	1760	42.14	44.91	1.72	1928	46.27	45.27	2.44
14 North Caucasus Krai	307	78.16	81.18	6.38	374	64.88	63.33	1.84
15 Belorussian SSR	341	30.12	33.41	0.84	371	29.62	29.44	1.07
16 Ukrainian SSR	2983	42.03	42.25	0.88	2945	39.54	38.73	0.94
17 Turkmen SSR	31	91.93	80.81	2.34	29	74.12	72.74	5.01

Sources to Appendix Table I2

January: SO No 3, 1928, pp 134-137.
February: SO No 4, 1928, pp 130-133
March: SO No 5, 1928, pp 140-141
April: SO No 6, 1928, pp 132-133
May: SO No 7, 1928, pp 131-132
June: SO No 8, 1928, pp 136-137
July: SO No 9, 1928, pp 132-133
August: SO No 10, 1928, pp 136-137
September: SO No 11, 1928, pp 132-133
October: SO No 12, 1928, pp 138-141
November: SO No 1, 1929, pp 136-138
December: SO No 2, 1929, pp 136-138

Notes to Appendix Table I2

January: Data for North-Eastern Raion does not include Komi ASSR.
Data for Leningrad Oblast does not include Karelian ASSR. Data for North Caucasus Krai, taken from percentage changes given in SO No 2, 1928, pp 130-133.

Lines 6 and 13 are computed using weights provided in Appendix Table H2

February: Lines 6 and 13 are computed using weights provided in Appendix Table H2.

March: From March to September no breakdown of budget data in the consumer and producer areas was provided by SO.

April: Line 16, is a rough estimate, taking figures for April 1927 (see Appendix Table I7) and adjusting them by the average percentage change between March, May-December 1927 and the corresponding period in 1928.

May: Data for Ukrainian SSR based on percentage changes given in SO No 8, 1928, pp 136-137.

Appendix Table I3

Total Income and Expenditure of Peasant Households, 1928, Selected Areas of the USSR (rubles/household)

Raions	Households studied (average)	Total income	Total expenditure	of which flour and groats	of which manufactured goods
1 Consumer areas	2079	561.42	559.12	45.35	223.47
2 Producer areas	1704	469.07	469.28	24.84	182.73
3 North Caucasus Krai	369	765.72	762.27	35.08	279.98
4 Belorussian SSR	272	297.17	294.02	18.80	101.56
5 Ukrainian SSR	2982	447.18	438.60	10.58	168.95
6 Turkmen SSR	31	869.68	857.60	68.52	332.81

which it is assumed to be comparable with, only covered the southwest of Urals Oblast. An examination of Table I2 will also show that detailed regional figures are only given for January, February and October-December 1928. For the rest of the year lines 1-5 and 7-12 were aggregated by TsSU into producer and consumer areas respectively. This was done on the basis of the conditions of agricultural production that prevailed in these areas. Since this is the only data available for 1928, this severely limits our ability to make a regional comparison with 1934-37, because, as Table I3 shows, in order to maintain consistency and provide meaningful annual income and expenditure figures we have been forced to aggregate all of the data into consumer and producer areas. This means that the study will not be as general as that in Table I1, but it will still include a substantial number of areas not represented in the 1934-37 studies. This is best illustrated by referring to Appendix Tables I4, I5 and I6.

Appendix Table I4 gives the income and expenditure of peasant households in 1928 based on the 1928-34 comparison. Lines 1 and 3 give figures for the consumer and producer areas of the USSR, using aggregate weights. They are lines 1 and 2 of Appendix Table I3, multiplied by the total number of households in these areas; see note 1 to Appendix Table I4. Only the consumer and producer areas have been listed here because, as we can see in Appendix Table G4, they covered those listed for 1934. Lines 2 and 4 of Appendix Table I3 use the same income and expenditure data as above, but the weights are different; see notes to the table. In this case the actual statistical raions which cover the areas listed in 1934 have been chosen, and the income and expenditure data has been multiplied by the total number of peasant households in them.

Lines 7 and 8 of the table show how the differences in weighting affect the average income and expenditure per household, with the aggregate weights giving lower totals than the given-raion weights. This is explained by the fact that the consumer areas in 1928 which corresponded with those in 1934 were more populous than the producer areas and they had larger incomes and expenditure. The same method of analysis has been used to calculate the figures presented in Appendix Tables I5 and I6. These tables, however, also include

Appendix Table I4

Average Income and Expenditure of Peasant Households, 1928

(1928-34 comparison, m rubles)

Raions	Total income	Total expenditure	of which flour and groats	manufactured goods
1 Consumer areas (aggregate weights)	3233.9	3220.6	261.2	1287.2
2 Consumer areas (given-raion weights)	2606.3	2595.6	210.5	1037.4
3 Producer areas (aggregate weights)	2923.1	2924.4	154.8	1138.7
4 Producer areas (given-raion weights)	1201.0	1201.5	63.6	467.9
5 Total (1 + 3, aggregate weights)	6157.0	6145.0	416.0	2425.9
6 Total (2 + 4, given-raion weights)	3807.3	3797.1	274.1	1505.3
7 Av/household (based on line 5)	513.43	512.43	34.69	202.30
8 Av/household (based on line 6)	528.59	527.18	38.06	208.99

Notes to Appendix Table I4

The income and expenditure data used in the calculations is taken from Appendix Table I3. Weights are taken from Appendix Table H2.

Lines 1, 3: The aggregate weights are those given in lines 6 and 13 of Appendix Table H2.

Line 2: The weight is 4642.3 thousand households, made up of 856.3 thousand households in Leningrad Oblast, 757.4 thousand in Western Raion and 3028.6 thousand in Central Industrial Raion (see Appendix Table G4 and H2 for a list of the areas covered in the 1934 budget studies).

Line 4: The weight is 2560.4 thousand households, made up of 1264.0 thousand in Urals Oblast, and 1296.4 thousand in Middle Volga Raion.

Line 7: This is line 5 divided by 11991.9 thousand - the total number of households used as aggregate weights.

Line 8: This is line 6 divided by 7202.7 thousand - the total number of households used as given-raion weights.

Appendix Table I5

Average Income and Expenditure of Peasant Households, 1928

(1928, - 1935-37, 13 oblast comparison, m rubles)

Raions	Total income	Total expenditure	of which flour and groats	manufactured goods
1 Consumer areas (aggregate weights)	3233.9	3220.6	261.2	1287.2
2 Consumer areas (given - raion weights)	2606.3	2595.6	210.5	1037.4
3 Producer areas (aggregate weights)	2923.1	2924.4	154.8	1138.7
4 Producer areas (given-raion weights)	2190.5	2191.4	116.0	853.3
5 North Caucasus Krai	1067.7	1062.9	48.9	390.4
6 Belorussian SSR	238.6	236.1	15.1	81.6
7 Ukrainian SSR	2313.6	2269.2	54.7	874.1
8 Total (1,3,5-7, aggregate weights)	9776.9	9713.2	534.7	3772.0
9 Total (2,4,5-7 given-raion weights)	8416.7	8355.2	445.2	3236.8
10 Av/household (rubles, based on line 8)	504.92	501.64	27.61	194.80
11 Av/household (rubles, based on line 9)	504.50	500.81	26.69	194.01

Notes to Appendix Table I5

The income and expenditure data used in the calculations is taken from Appendix Table I2. Weights are taken from Appendix Table H2.

Lines 1, 3: The aggregate weights used are those given in lines 6 and 13 of Appendix Table H2.

Line 2: The weight is 4642.3 thousand households, the same as that in the 1928-34 comparison; see Appendix Table I4 for an explanation.

Line 4: The weight is 4669.8 thousand households, made up of 1264.0 thousand in Urals Oblast, 1296.4 thousand in Middle Volga Raion and 2109.4 thousand in Central Black Earth Raion; see Appendix Table G5 for a list of the areas covered in the 1928-35/36 comparison.

Line 5: The weight used was 1394.4 thousand households.

Line 6: The weight used was 803 thousand households.

Line 7: The weight used was 5173.8 thousand households.

Line 10: This is line 8 divided by 19363.1 thousand - the total number of households used as aggregate weights.

Line 11: This is line 9 divided by 16683.3 thousand - the total number of households used as given-raion weights.

Appendix Table I6
Average Income and Expenditure of Peasant Households, 1928
(1928-37, 28 oblast comparison, m rubles)

Raions	Total income	Total expenditure	of which flour and manufactured groats goods	
1 Consumer areas (aggregate weights)	3233.9	3220.6	261.2	1287.2
2 Consumer areas (given-raion weights)	2980.3	2968.1	240.7	1186.3
3 Producer areas (aggregate weights)	2923.1	2924.4	154.8	1138.7
4 Producer areas (given-raion weights)	2640.9	2642.1	139.9	1028.8
5 North Caucasus Krai	1067.7	1062.9	48.9	390.4
6 Belorussian SSR	238.6	236.1	15.1	81.6
7 Ukrainian SSR	2313.6	2269.2	54.7	874.1
8 Turkmen SSR	162.7	160.5	12.8	62.3
9 Total (1,3,5-8, aggregate weights)	9939.6	9873.7	547.5	3834.3
10 Total (2,4-8, given-raion weights)	9403.8	9338.9	512.1	3623.5
11 Av/household (rubles, based on line 9)	508.41	505.04	28.01	196.13
12 Av/household (rubles, based on line 10)	508.40	504.89	27.69	195.90

Notes to Appendix Table I6

The income and expenditure data used in the calculations is taken from Appendix Table I2. Weights are taken from Appendix Table H2.

Lines 1, 3: The aggregate weights used are those given in lines 6 and 13 of Appendix Table H2.

Line 2: The weight is 5308.5 thousand, made up of 905.2 thousand households in Leningrad Oblast and Karelian ASSR, 757.4 thousand in Western Raion, 3028.6 thousand in Central Industrial Raion, and 617.3 thousand in Vyatka Raion.

Line 4: The weight is 5630.0 thousand households, made up of 1264.0 thousand in Urals Oblast, 1296.4 thousand in Middle Volga Raion, 2109.4 thousand in Central Black-Earth Raion, and 960.2 thousand in Lower Volga Krai.

Lines 5-7: See lines 5-7 of Appendix Table H2 for a breakdown of the weights used.

Line 8: The weight used was 187.1 thousand households.

Line 11: This is line 9 divided by 19550.2 thousand - the total number of households used as aggregate weights.

Line 12: This is line 10 divided by 18496.8 thousand - the total number of households used as given-raion weights.

North Caucasus Krai, Belorussian SSR and Ukrainian SSR, and in Appendix Table I6, Turkmen SSR. It is interesting to note here that there is not a great deal of difference between the income or expenditure levels per household presented in the tables when either aggregate or given-raion weights are used; see lines 10 and 11 of Appendix Table I5, and lines 11 and 12 of Appendix Table I6. For example, in Appendix Table I5 total expenditure per household was R501.64 using aggregate weights and R500.81 using given-raion weights. This is because of the inclusion in later years of areas which did not have variable weights - North Caucasus Krai etc - and the fact that the more comprehensive coverage in 1935-37 combined with the practice of including the whole of a statistical raion in the 1920s studies whenever a part of it was covered in the 1930s studies, meant that an increasing part of the consumer and producer areas was covered in the given-raion weights, which meant that the difference in results was reduced.

Given the limitations of the 1928 studies as presented above we shall also make a comparison with the more regionally differentiated 1927 budget studies as our base. Appendix Table I7 presents the monthly budget data for 1927, collected by voluntary correspondents for TsSU. Fourteen areas of the USSR are listed, because of changes in the TsSU statistical regions that were introduced in October 1927; see notes to Appendix Table H1. Appendix Table I8 aggregates the monthly data presented in Appendix Table I7. Some of the totals, for Leningrad Oblast and Karelian ASSR for example, look extremely low. This is because for a number of the areas covered the data is not for all of 1927; see notes to table.

Appendix Tables I9, I10 and I11 use the data presented in Appendix Table I8 to make comparisons with the areas covered in the 1934-37 budget studies. The choice of areas included was made on the basis of Appendix Tables G3-G6. Again, it should be noted that we have not chosen the raions in the 1927 study which match exactly those in the 1934-37 studies. The 1927 studies covered large geographical areas and were more comprehensive than those in 1934-37, which covered much smaller oblasts, in most cases. As a result, the 1927 data, which is assumed to be comparable with 1934-37, covered a larger area of the USSR than the latter. Given the limitations of the other budget

studies for 1928 presented in this section, we can conclude that this is the best comparison with 1934-37 that we have available. Furthermore, the inaccuracies introduced in the figures by limitations in the regional comparison are counteracted somewhat by the fact that slight adjustments have been made in the weighting, where feasible, to limit coverage to clearly identified and substantial geographical areas - for example, line 10 of Appendix Table I11 has been weighted by the number of households in Orenburg Guberniya rather than that for Bashkir-Orenburg Okrug - and that in the 1935-37 (13-oblast), and especially the 1937 (28 oblast), study the larger number of areas covered meant that larger proportions of the areas in 1927 were covered - for example, whereas only one area of North Caucasus Krai was covered in the 13-oblast study, four areas were covered in the 28-oblast study, see Appendix Tables G5 and G6. Thus, in the comparison with 1927, that for 1937 (28 oblast) is regarded as the most accurate, and that for 1934 - the least accurate.

An examination of Appendix Tables I9 - I11 clearly shows that the smaller the number of geographical areas covered the higher the income and expenditure per household, eg total income and expenditure ranged from R506.60 and R503.22 respectively per household in the 1934 comparison, to R480.50 and R470.85 respectively in the 1937 (13 oblast) comparison. This appears to show that our regional breakdown of the data and the weighting method are reflecting the tendency of the earlier 1930s studies to concentrate on areas with high income and expenditure levels - especially the Moscow Oblast area. However, this is counteracted somewhat by the exclusion from the comparison with 1937 of such areas as the Tadzhik, Uzbek, Turkmen, Azerbaidzhan, Armenian and Georgian SSRs, which had higher income and expenditure levels on average than the other areas in the study - at least on the evidence of data for 1937, see Nesmii, 1938, op.cit., p 104. In this case we may conclude that the data based on the comparisons with eight and 13 oblast studies do reflect this tendency, because relatively few areas were omitted from the 1927 data compared with the studies in these years, whereas the case with regard to the 1937 28 oblast comparison is not proven.

The study covers 1928-37, but the most detailed budget data refers to 1927. To solve this problem we shall adjust the figures for income

and expenditure per household - based on the 1934-37 comparisons - by the average percentage change in income and expenditure between 1927 and 1928. Unfortunately, since we do not have comprehensive regional data on the change between these two dates we shall use average data for the RSFSR, Ukrainian SSR and Belorussian SSR. Appendix Table I12 gives the income and expenditure levels of these areas in 1927 and 1928. Line 14 shows the percentage change. Applying these percentages to the totals in Appendix Tables I9 - I11, we get the totals presented in lines 1-3 of Appendix Table I13. Finally, to obtain figures for expenditure on manufactured goods and flour and groats purchased in state and co-operative trade 84.2 per cent of the figures for each year presented in columns c and d of Appendix Table I13 has been taken (this is the percentage of total rural retail trade accounted for by the socialised sector in 1928).¹ This gives the following total expenditure on flour and groats and manufactured goods in rural retail socialised trade in 1928:

	rubles/household
1934 comparison	216.68
1935-37 comparison (13 oblast)	187.27
1937 comparison (28 oblast)	185.56

A note on accuracy

Apart from the problems of comparability which have already been highlighted, it should also be stressed that omissions from the 1927-28 budget studies do not enable us to claim that the study does anything other than give an approximation of income and expenditure levels in these years for areas broadly comparable with those studied in 1934-37. On balance one would expect the study to overstate the increase in income and expenditure over the 1928-37 period because, in the 1928-37 comparison, technical crop producers and areas with natural geographical advantages, such as Tadzhik and Uzbek SSRs and Georgian SSR, were not included in the 1928 data.

Footnote

- 1 See A A Barsov 1969 op.cit. p 27.

Monthly Income and Expenditure of Peasant Households, 1927, Selected Areas of the USSR (rubles/household)

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Appendix Table I7 (continued)

Monthly Income and Expenditure of Peasant Households, 1927, Selected Areas of the USSR (rubles/household)

April

March

Raions

	Households studied	Total income	Total expenditure	of which		Households studied	Total income	Total expenditure	of which	
				flour and groats	manufact. goods				flour and groats	manufact. goods
1 Far Northern	68	53.57	52.03	8.06	21.44	42	45.72	43.95	5.83	20.64
2 Northern	178	40.40	40.95	3.33	15.28	185	34.38	34.77	3.01	13.24
3 North-Western	400	42.33	42.30	7.72	16.52	387	38.57	39.52	6.99	15.97
4 Western	184	27.08	28.50	2.65	8.97	193	27.00	26.52	3.64	10.03
5 Moscow Industrial	546	53.75	52.64	5.59	22.23	617	50.49	50.43	5.93	22.63
6 Central Agricultural	309	31.73	34.45	2.19	11.76	336	31.22	32.11	2.49	12.34
7 Urals Oblast	524	33.69	31.78	2.98	11.20	436	36.10	39.60	3.22	17.41
8 Bashkir-Orenburg Okrug	53	26.92	26.50	1.37	12.74	58	33.80	34.85	2.26	17.97
9 Volga	352	46.22	46.65	0.63	17.82	271	30.13	24.29	2.31	15.48
10 Volga-Kama	310	41.00	39.65	2.78	16.59	415	33.67	32.36	1.60	14.46
11 North Caucasus Krai										
a Steppe	337	51.75	55.97	2.03	19.49	278	42.95	43.71	1.12	22.07
b Mountain area	60	61.10	50.49	4.65	22.02	46	39.58	46.51	1.90	19.88
12 South-Western Siberia	172	31.27	31.15	1.30	13.26	169	28.06	29.54	1.71	13.91
13 Belorussian SSR	174	30.09	32.05	1.00	12.84	179	28.15	28.16	3.14	12.24
14 Ukrainian SSR	4012	36.95	33.42	0.57	13.74	3609	38.50	38.77	1.09	16.21

Monthly Income and Expenditure of Peasant Households, 1927, Selected Areas of the USSR (rubles/household)

Raions	May				June					
	Households studied	Total income	Total expenditure	of which		Households studied	Total income	Total expenditure	of which	
				flour and groats	manufact. goods				flour and groats	manufact. goods
1 Far Northern	49	45.69	43.18	6.46	19.86	49	45.23	49.23	9.49	21.85
2 Northern	194	30.78	29.25	2.18	12.54	181	30.74	31.03	3.24	14.31
3 North-Western	373	35.68	34.25	4.77	12.08	376	34.25	34.90	7.26	13.62
4 Western	181	31.23	30.36	2.60	8.70	187	29.04	28.16	3.17	8.73
5 Moscow Industrial	610	46.03	46.52	4.35	16.28	587	52.40	52.55	6.91	20.67
6 Central Agricultural	274	30.79	28.99	1.35	9.84	413	33.93	31.98	2.22	13.18
7 Urals Oblast	436	31.77	30.49	2.19	12.19	399	34.86	36.31	2.80	16.04
8 Bashkir-Orenburg Okrug	52	25.48	25.87	1.25	13.59	52	44.08	41.39	2.09	16.03
9 Volga	270	31.31	31.05	1.52	13.39	300	41.98	39.89	2.12	14.63
10 Volga-Kama	420	27.84	27.44	1.09	11.36	385	28.82	29.59	1.64	12.92
11 North Caucasus Krai										
a Steppe	297	51.26	50.51	1.40	19.07	206	55.51	55.78	3.10	25.00
b Mountain area	52	55.82	43.78	4.73	18.31	34	40.30	49.00	4.19	21.78
12 South-Western Siberia	127	26.15	26.17	1.28	10.51	115	36.07	35.32	1.97	16.82
13 Belorussian SSR	150	23.91	22.34	1.83	7.05	146	26.07	28.41	2.12	9.03
14 Ukrainian SSR	2561	38.46	36.58	0.93	11.61	2058	37.89	38.52	1.17	13.58

Appendix Table I7 (continued)

Monthly Income and Expenditure of Peasant Households, 1927, Selected Areas of the USSR (rubles/household)

Raions	July					August				
	Households studied	Total income	Total expenditure	of which		Households studied	Total income	Total expenditure	of which	
				flour and groats	manufact. goods				flour and groats	manufact. goods
1 Far Northern	64	43.76	46.80	9.68	17.09	61	38.07	36.06	5.69	16.69
2 Northern	164	28.44	28.32	4.39	13.14	166	27.96	27.49	2.17	11.23
3 North-Western	334	33.06	32.96	6.64	14.16	325	29.57	28.48	3.42	12.89
4 Western	173	27.43	26.95	4.74	9.25	160	23.57	23.19	1.79	7.90
5 Moscow Industrial	532	45.66	46.11	6.80	19.17	610	43.20	41.77	3.56	17.55
6 Central Agricultural	351	24.77	25.34	1.66	11.41	371	31.95	28.41	0.99	11.39
7 Urals Oblast	409	32.38	33.52	2.77	14.51	443	24.87	24.93	2.26	10.54
8 Bashkir-Orenburg Okrug	64	31.76	31.17	3.79	11.13	62	40.08	38.76	1.65	13.91
9 Volga	225	32.69	32.12	2.13	10.79	289	37.37	33.38	1.06	12.85
10 Volga-Kama	319	29.18	27.69	1.33	12.32	343	24.40	23.87	1.10	9.16
11 North Caucasus Krai										
a Steppe	257	52.70	51.57	3.18	19.48	308	67.96	64.92	1.78	24.37
b Mountain area	37	47.83	37.80	6.69	17.46	43	54.23	59.58	4.72	25.45
12 South-Western Siberia	176	37.22	37.28	2.72	18.23	96	31.35	33.85	1.26	11.89
13 Belorussian SSR	132	22.64	21.88	2.55	6.55	173	19.11	17.66	0.69	7.30
14 Ukrainian SSR	1502	34.85	35.38	0.97	13.32	2164	41.07	37.27	0.48	13.68

Raions	September				October						
	Households studied	Total income	Total expenditure	of which		Households studied	Total income	Total expenditure	of which		
				flour and groats	manufact goods				flour and groats	manufact. goods	
1 Far Northern	61	47.62	45.11	3.55	15.94						
2 Northern	158	31.18	29.46	0.86	11.14						
3 North Eastern						222	42.83	43.46	1.29	16.00	
4 North-Western	310	33.57	30.49	1.60	14.13	316	48.53	47.75	3.67	17.42	
5 Western	164	27.62	25.55	1.29	10.39	179	38.55	37.10	1.54	10.93	
6 Moscow Industrial	616	52.49	47.86	2.90	20.92	578	64.38	66.67	3.58	21.98	
7 Central Agricultural	406	44.16	40.59	0.69	15.54	391	48.83	46.71	1.10	16.49	
8 Urals Oblast	417	33.32	31.41	1.95	11.30	355	35.21	35.61	1.22	11.23	
9 Bashkir-Orenburg Okrug	62	36.85	36.76	1.75	14.54	37	29.80	31.18	2.30	10.99	
10 Volga	287	47.92	46.19	1.05	16.90						
11 Volga-Kama	340	30.77	27.80	1.13	11.97						
a Vyatka						253	34.73	33.13	0.87	12.33	
b Middle Volga						297	39.55	39.35	1.48	14.67	
c Lower Volga						160	53.02	54.09	1.29	22.05	
12 North Caucasus Krai											
a Steppe	274	89.03	87.22	2.04	30.90	338	66.67	69.59	1.03	27.34	
b Mountain area	58	47.61	49.19	3.08	25.46	43	60.80	60.79	3.36	25.68	
13 South-Western Siberia	134	33.05	34.64	1.36	14.97	110	37.52	38.04	0.42	17.60	
14 Belorussian SSR	141	22.05	20.58	0.54	8.05	134	35.24	30.50	0.68	8.68	
15 Ukrainian SSR	1788	47.27	46.40	0.39	17.56	2873	50.69	50.14	0.49	19.36	

Appendix Table I7 (continued)

Monthly Income and Expenditure of Peasant Households, 1927, Selected Areas of the USSR (rubles/household)

Raions	Households studied	November			December		
		Total income	Total expenditure	of which flour and groats	Total income	Total expenditure	of which flour and groats
1 North Eastern	214	47.90	41.63	1.19	43.26	45.41	1.30
2 Leningrad Oblast	309	39.82	40.59	3.90	38.52	39.76	4.55
3 Western	178	33.76	34.96	2.80	32.23	32.85	2.58
4 Moscow Industrial sub-raion	655	57.67	56.16	4.24	57.87	59.36	5.37
5 Central Black Earth	386	39.20	38.23	1.18	38.12	37.92	0.84
6 Urals Oblast	440	47.32	46.55	2.05	50.05	51.41	3.00
7 Bashkir ASSR	58	28.30	26.61	0.97	35.77	35.12	4.48
8 a Vyatka	279	36.03	35.39	1.23	45.26	46.96	1.29
b Middle Volga	286	31.01	30.20	1.08	40.26	37.45	1.75
c Lower Volga	172	48.86	47.90	4.59	46.79	44.45	3.36
9 North Caucasus Krai							
a Steppe	322	56.17	59.72	1.87	56.58	54.83	2.49
b Mountain area	25	44.67	43.21	3.25	40.68	42.80	3.29
10 South-Western Siberia	131	38.13	38.92	0.66	53.93	53.57	1.36
11 Belorussian SSR	249	24.16	25.91	1.23	24.63	27.48	0.86
12 Ukrainian SSR	3001	43.94	43.48	0.60	42.65	42.36	0.84
							15.45

Notes to Appendix Table I7

January: Data for North Caucasus Krai (mountain area), and Belorussian SSR, taken from percentage changes provided by SO No 4, 1927, pp 106-107. Data for Ukrainian SSR in January and February is based on figures for the corresponding months in 1928 adjusted in line with the average change between 1927 and 1928; average based on data for March, May-December in both years. It is accepted that this can only be a rough approximation of income and expenditure levels in these months. Figures for number of households surveyed are taken from January and February 1928.

February: Urals Oblast data is for 21 January - 20 February. Ukrainian SSR - see note on January.

March: Urals Oblast data is for 21 February - 20 March. Ukrainian SSR - calculated from percentage changes for 4012 households, given in SO No 6, 1927, pp 120-121.

April: Data for Urals Oblast based on percentage changes quoted in SO No 7, 1927, pp 120-121.

May: Bashkir-Orenburg Okrug - based on percentage changes given in SO No 8, 1927, pp 122-123.

June: Data for Far Northern Raion does not include Archangel and Murmansk Guberniyas. Data for North Caucasus Krai does not include Shakht-Donets, Stavropol and Armavir Okrugs, and the Ingush and Kabardino Autonomous Oblasts. (There is a possible source of confusion here, since according to SO No 8, 1927, pp 98,100, Shakht-Donetsk Okrug was established in the TsSU statistical plan discussed in July and August 1927. The resulting changes in statistical areas were introduced in the TsSU peasant budget studies in October 1927. So far no adequate explanation has been found for this.)

October: From October onwards new statistical areas established by TsSU in July and August 1927 were introduced; see SO No 8, 1927, p98. For a full description of the changes see notes to Appendix Table H1.

Since the changes involved a rearrangement of the areas already included in the study in earlier months, this should not affect the overall results.

Line 1 is for Leningrad Oblast and Karelian ASSR.

November: Line 1, data for Leningrad Oblast only.

December: Line 1, data for Leningrad Oblast only.

Sources to Appendix Table I7

January: SO No 3, 1927, pp 94-95.
February: SO No 4, pp 106-107.
March: SO No 5, 1927, pp 102-103.
April: SO No 6, 1927, pp 120-121.
May: SO No 7, 1927, pp 120-121.
June: SO No 8, 1927, pp 122-123.
July: SO No 9, 1927, pp 116-117.
August: SO No 10, 1927, pp 102-103.
September: SO No 11, 1927, pp 128-129.
October: SO No 12, 1927, pp 126-127.
November: SO No 1, 1928, pp 136-137.
December: SO No 2, 1928, pp 132-133.

Appendix Table I8

Total Income and Expenditure of Peasant Households, 1927, Selected Areas of the USSR (rubles/household)

Raions	Households studied (average)	Total income	Total expenditure	flour and groats	of which manufactured goods
1 <u>Far Northern</u>	53	410.33	403.88	58.96	164.52
2 <u>Northern</u>	168	307.34	296.40	25.43	108.62
3 <u>North-Western</u>	353	334.62	325.44	54.53	133.41
4 <u>Leningrad Oblast and Karel.ASSR</u>	316	48.53	47.75	3.67	17.42
5 <u>Leningrad Oblast</u>	347	78.34	80.35	8.45	34.65
6 <u>Western</u>	164	351.48	345.22	31.88	119.65
7 <u>Moscow Industrial</u>	561	619.23	614.88	61.55	248.28
8 <u>Central Agricultural</u>	306	293.29	285.40	15.23	110.60
9 <u>Central Black-Earth</u>	390	126.15	112.86	3.12	49.10
10 <u>Urals Oblast</u>	423	431.18	433.02	30.15	161.51
11 <u>Bashkir-Orenburg Okrug</u>	53	311.24	302.99	18.51	123.47
12 <u>Bashkir ASSR</u>	52	93.87	92.91	7.75	28.59
13 <u>Volga</u>	268	349.65	342.19	13.63	136.63
14 <u>Volga-Kama</u>	337	289.02	281.02	15.33	118.22
15 <u>Vyatka</u>	270	116.02	115.48	3.39	43.54
16 <u>Middle Volga</u>	290	110.82	107.00	4.31	40.70
17 <u>Lower Volga</u>	180	148.67	146.44	9.24	51.30

Appendix Table I8 (continued)

Raions	Households studied (average)	Total income	Total expenditure	flour and groats	of which manufactured goods
18 North Caucasus Krai					
a Steppe	281	675.06	675.90	22.97	275.76
b Mountain area	42	579.16	574.65	44.05	247.74
19 South-Western Siberia	126	414.86	421.17	16.38	175.68
20 Belorussian SSR	177	310.09	310.54	16.94	110.85
21 Ukrainian SSR	2760	495.35	477.86	8.72	174.50

Areas underlined are those which do not cover 12 months of 1927. See notes for description of coverage.

Notes to Appendix Table I8

All data is taken from Appendix Table I7

Lines 1, 2, 3, 8, 11, 13, 14: Data is for the first nine months of 1927

Line 4: Data for October 1927

Line 5: Data for November and December 1927

Lines 6, 7, 10, 18, 19, 20, 21: Data for all of 1927

Lines 9, 12, 15, 16, 17: Data for last three months of 1927

Differences in coverage of the budget studies in 1927 have made it necessary to include all areas studied in this table; see Appendix Table G3 . See Appendix Tables I9 - I11 for weighted average budget data for areas corresponding to those covered in the 1934-37 budget studies.

Appendix Table I9
Average Income and Expenditure of Peasant Households in 1927
(1927-34 comparison, m rubles)

Raions	Total income	Total expenditure	flour and groats	of which manufactured goods
1 North-Western	285.6	277.8	46.6	113.9
2 L'grad Obl, Karel. ASSR	41.4	40.8	3.1	14.9
3 L'grad Oblast	66.9	68.6	7.2	29.6
4 Moscow Industrial Raion	1418.8	1408.8	141.0	568.9
5 Urals Oblast	534.8	537.1	37.4	200.3
6 Bashkir-Orenburg Okrug	40.7	39.6	2.4	16.2
7 Volga Raion	331.5	324.4	12.9	129.5
8 Middle Volga Raion	119.6	115.4	4.7	43.9
9 South-Western Siberia	352.4	357.8	13.9	149.2
10 Total	3191.6	3170.3	269.2	1266.4
11 Av/household (rubles)	506.60	503.22	42.73	201.02

Notes to Appendix Table I9

All calculations are based on income and expenditure data provided by Appendix Table I8. Data on number of peasant households in 1927 taken from Appendix Table H1, unless otherwise stated.

Lines 1, 4, 5, 7, 9: Figures were calculated by multiplying income and expenditure data by the corresponding number of households in the raion.

Lines 2, 3: Population data used to multiply income and expenditure figures was that for North-Western Raion, as given in Appendix Table H1. Comparison of lines 3-5 of Appendix Table H1 shows that there was little difference between the number of households in each of the raions, and their coverage was similar.

Line 6: Data has been multiplied by 130.8 thousand - the number of households assumed to be in Orenburg Guberniya in 1927; see Appendix Table H1, figure obtained by subtracting line 12 from line 11.

Line 8: Volga Raion was split between Middle and Lower Volga Raions from October 1927, and Orenburg Guberniya was included in Middle Volga Raion. Thus, data for Middle Volga Raion has been multiplied by the 948.1 thousand households in the former Volga Raion and 130.8 thousand households in Orenburg Guberniya.

Line 11: This is line 10 divided by the total number of households used to multiply the income and expenditure data - 6.3m. This is the total number of households in the following areas: North-Western Raion - 853.6 thousand; Moscow Industrial Raion - 2291.2 thousand; Central Black-Earth Raion - 1240.3 thousand; Orenburg Guberniya - 130.8 thousand; Volga Raion - 948.1 thousand; South-Western Siberia - 849.5 thousand.

Appendix Table I10
Average Income and Expenditure of Peasant Households in 1927
(1927, 1935-37, 13 oblast comparison, m rubles)

Raions	Total income	Total expenditure	of which flour and manufactured groats goods	
1 North-Western	285.6	277.8	46.6	113.9
2 L'grad Obl, Kare1.ASSR	41.4	40.8	3.1	14.9
3 Leningrad Oblast	66.9	68.6	7.2	29.6
4 Western	263.2	258.5	23.9	89.6
5 Moscow Industrial	1418.8	1408.8	141.0	568.9
6 Central Agricultural	590.3	574.4	30.7	222.6
7 Central Black-Earth	253.9	227.1	6.3	98.8
8 Middle Volga	61.5	59.3	2.4	16.2
9 Urals Oblast	534.8	537.1	37.4	200.3
10 Bashkir-Orenburg Okrug	40.7	39.6	2.4	16.2
11 Volga	331.5	324.4	12.9	129.5
12 Lower Volga	78.0	76.8	4.9	26.9
13 North Caucasus Krai (steppe)	716.2	717.1	24.4	292.6
14 Belorussian SSR	247.0	247.4	13.5	88.3
15 Ukrainian SSR	2531.6	2442.2	44.6	891.8
16 South-Western Siberia	352.4	357.8	13.9	149.2
17 Total	7813.8	7657.7	415.2	2949.3
18 Av/household (rubles)	488.36	478.61	25.95	184.33

Notes to Appendix Table I10

Data on the number of peasant households in 1927 is taken from Appendix Table H1, unless otherwise stated.

Income and expenditure data used is that given in Appendix Table I8.

Lines 1, 4, 5, 7, 9, 11, 13, 14, 15, 16: Data has been multiplied by the number of peasant households in the relevant area.

Lines 2, 3: Data has been multiplied by the number of peasant households in North-Western Raion. All of the areas had similar coverage, except that North-Western Raion did not include Karelian ASSR.

Line 6: The number of peasant households in Central Black-Earth Raion has been used as the weight in this case. This means that the 409.3 thousand households assumed to be in Penza Guberniya have been excluded - both raions covered the same area, except for Penza Guberniya, and it was felt that this could be excluded since it was not covered by the 1934-37 budget studies.

Line 8, 12: Volga Raion was split between Middle and Lower Volga Raions from October 1927, and Orenburg Guberniya was also added to Middle Volga Raion at this time. Of the 948.1 thousand households in Volga Raion 524.3 thousand (55.3%) were allocated to Lower Volga Raion, and 423.8 thousand (44.7%) to Middle Volga Raion. The calculation was made on the basis of the percentage of rural population on 1/1/28 of the areas transferred to Lower and Middle Volga raions (SSS-28 pp 20-25). Finally, the 130.8 thousand households in Orenburg Guberniya were added to the Middle Volga Raion weight, giving a total of 554.6 thousand households.

Line 10: Data has been multiplied by the 130.8 thousand households assumed to be in Orenburg Guberniya.

Line 18: This is line 17 divided by the total number of peasant households used to weight the data - 16.0m. This was obtained by adding together the number of peasant households in the following areas: North-Western Raion - 853.6 thousand; Western Raion - 748.8

thousand; Moscow Industrial Raion - 2291.2 thousand; Central Black-Earth Raion - 2012.8 thousand; Urals Oblast - 1240.3 thousand; Orenburg Guberniya - 130.8 thousand; Volga Raion - 948.1 thousand; North Caucasus Krai (steppe) - 1060.9 thousand; Belorussian SSR - 796.6 thousand; Ukrainian SSR - 5110.7 thousand; South-Western Siberia - 849.5 thousand.

Appendix Table I11
Average Income and Expenditure of Peasant Households in 1927
(1927-37, 28 oblast comparison, m rubles)

Raions	Total income	Total expenditure	of which flour and groats	manufactured goods
1 North-Western	285.6	277.8	46.6	113.9
2 L'grad Oblast, Karel.ASSR	43.5	42.8	3.3	15.6
3 Leningrad Oblast	66.9	68.6	7.2	29.6
4 Far Northern	17.7	17.5	2.6	7.1
5 Moscow Industrial	1418.8	1408.8	141.0	568.9
6 Western	263.2	258.5	23.9	89.6
7 Central Agricultural	590.3	574.4	30.7	222.6
8 Central Black-Earth	253.9	227.1	6.3	98.8
9 Urals Oblast	534.8	537.1	37.4	200.3
10 Bashkir-Orenburg Okrug	40.7	39.6	2.4	16.2
11 Volga	331.5	324.4	12.9	129.5
12 Middle Volga	139.3	134.5	5.4	51.1
13 Lower Volga	78.0	76.8	4.9	26.9
14 Volga-Kama	378.8	368.3	20.1	154.9
15 Vyatka	70.6	70.3	2.1	26.5
16 North Caucasus Krai (steppe)	716.2	717.1	24.4	292.6
17 North Caucasus Krai (mountain area)	144.1	143.0	11.0	61.6
18 Belorussian SSR	247.0	247.4	13.5	88.3
19 Ukrainian SSR	2531.6	2442.2	44.6	891.8
20 South-Western Siberia	352.4	357.8	13.9	149.2
21 Total	8504.9	8334.0	454.2	3235.0
22 Av/household (rubles)	480.50	470.85	25.66	182.77

Notes to Appendix Table I11

Data on the number of peasant households in 1927 is taken from Appendix Table H1 unless otherwise stated.

Income and expenditure data used is that given in Appendix Table I8.

Lines 1, 5, 6, 8, 9, 11, 14, 15, 16, 17, 18, 19, 20: Data has been multiplied by the number of peasant households in the relevant area.

Line 2: Income and expenditure data multiplied by 896.8 thousand households - the total number in North Western Raion plus 43.2 thousand households in Karelian ASSR (line 4 minus line 3 in Appendix Table H1).

Line 3: Data has been multiplied by the number of peasant households in North-Western Raion.

Line 4: Data for Far Northern Raion was multiplied by 43.2 thousand households (the number in Karelian ASSR). Karelian ASSR accounted for approximately 29.1 per cent of the households in Far Northern Raion.

There was no data available on Karelian ASSR in November and December 1927.

Line 7: Data was multiplied by the number of peasant households in Central Black Earth Raion. This excludes 409.3 thousand households assumed to be in Penza Guberniya.

Line 10: Data was multiplied by 130.8 thousand - the number of households assumed to be in Orenburg Guberniya (line 11 minus line 12 in Appendix Table H1).

Lines 12, 13: As in Appendix Table I10 (notes on lines 8,9) data for Lower Volga Raion has been multiplied by 423.8 thousand households. That for Middle Volga Raion has been multiplied by 1256.5 thousand households, consisting of 423.8 thousand from Volga Raion,

701.9 thousand from Volga-Kama Raion (Tatar and Chuvash ASSRs - see note to line 14 in Appendix Table H1), and 130.8 thousand households from Orenburg Guberniya.

Line 22: This is line 21 divided by the total number of households used to weight the data - 17.7m. The average will be very slightly understated due to the absence of data for Karelian ASSR in November-December 1927. It is believed that this will not significantly affect our overall result, since the understatement would probably be around 0.04 per cent.

The total number of peasant households was obtained by adding together the following totals: North-Western Raion - 853.6 thousand; Far Northern Raion (Karelian ASSR) - 43.2 thousand; Moscow Industrial Raion - 2291.2 thousand; Western Raion - 748.8 thousand; Central Black-Earth Raion - 2012.8 thousand; Urals Oblast - 1240.3 thousand; Orenburg Guberniya - 130.8 thousand; Volga Raion - 948.1 thousand; Volga-Kama Raion - 1310.5 thousand; North Caucasus (steppe) - 1060.9 thousand; North Caucasus (mountain area) - 248.8 thousand - Belorussian SSR - 796.6 thousand; Ukrainian SSR - 5110.7 thousand; South-Western Siberia - 849.5 thousand.

Appendix Table II2
Total Income and Expenditure of Peasant Households, 1927-28
(rubles/household, all-area data)

	1 Total income		2 Total expenditure		flour and groats		of which manufactured goods	
	a	b	a	b	a	b	c	d
	1927	1928	1927	1928	1927	1928	1927	1928
1 January	39.69	40.12	39.00	41.61	2.38	2.23	14.96	15.11
2 February	37.43	40.10	37.78	41.23	2.55*	2.46	13.85	14.64
3 March	39.93	42.43	40.11	42.83	2.42	2.68	15.95	15.81
4 April	36.42	36.67	37.55	36.41	2.69	2.61	15.98	14.59
5 May	35.81	37.29	34.46	36.92	1.94	2.69	12.46	13.87
6 June	38.23	37.96	38.14	37.38	2.85	2.72	14.94	15.93
7 July	34.93	37.57	34.80	36.57	2.83	2.81	13.81	16.03
8 August	36.81	37.63	35.01	35.64	1.63	1.87	13.74	16.02
9 September	44.25	44.68	42.45	44.57	1.32	1.58	16.57	16.59
10 October	52.59	56.94	52.62	55.71	1.24	1.28	19.20	21.48
11 November	46.16	50.16	45.74	51.83	1.43	1.39	17.92	19.06
12 December	49.36	52.97	49.53	51.42	1.80	1.54	18.66	20.38
13 Total	491.61	514.52	487.19	512.12	25.08	25.86	188.04	199.51
14 % change		+4.7%		+5.1%		+3.1%		+6.1%

* Approximate figure based on graph in SO No 5, 1929, p 134.

Sources: See note to Appendix Table II.

It is assumed that the table covers the same areas as those listed at the start of this appendix.

Appendix Table I13
Total Income and Expenditure of Peasant Households, 1928 (various
comparisons, rubles/household)

Comparison	Total income	Total expenditure	of which flour and groats	manufactured goods
	a	b	c	d
1 1934	530.41	528.88	44.06	213.28
2 1935-36	511.31	503.02	26.76	195.57
3 1937	503.08	494.86	26.46	193.92

Notes: Line 1 is line 11 of Appendix Table I9 multiplied by the average increase in income and expenditure between 1927 and 1928 - 4.7% for total income, 5.1% for total expenditure, 3.1% for flour and groats, and 6.1% for manufactured goods.

Line 2 is line 18 of Appendix Table I10 multiplied by the percentages outlined above.

Line 3 is line 22 of Appendix Table I11 multiplied by the percentages outlined above.

APPENDIX J

Peasant Budget Data, 1934-37

Appendix Table J1 below presents the available data on budgets of collective farm members in 1934-37. Dashes indicate that the information was not given in the sources available. The expenditure figures for 1934 should be regarded as rough estimates, because of the method used to calculate them; see notes to table.

It should be borne in mind that the figures refer to total purchases. The proportion of purchases of manufactured goods made in state and co-operative trade in 1935-37 were as follows:

1935	1936	1937
81.5%	86.1%	84.3%

Source: Nesmii 1940, op.cit., p 65.

According to Nesmii the proportion of individual peasants' purchases that were made in state and co-operative trade was even higher.

Of the purchases that were made outside of state and co-operative trade a small part consisted of reciprocal purchases between collective farm members, ie the re-sale of goods already purchased for the most part in state and co-operative trade. Given this, one would expect the real percentage of purchases of manufactured goods in retail socialised trade by collective farm members to be even higher.

Appendix Table J2 gives the level of purchases of manufactured goods in socialised trade made by collective farmers. The figures were calculated by applying the percentages given above to totals given in line 4 of Appendix Table J1; see notes to Appendix Table J2.

Appendix Table J1
Income and Expenditure of Collective Farm Members, 1934-37
(rubles/household)

Year and oblasts studied	Total income	Total expenditure	of which		of which flour & groats	Cols 3 + 5
			m'fact'd goods	agr'cul goods		
	1	2	3	4	5	6
1 1934 (8 oblast)	-	949.5	317.1	435.8	101.1	418.2
2 1935 (13 oblast)	-	1043.5	380.3	407.0	94.4	474.7
3 1936 (13 oblast)	-	1287.7	498.9	458.4	106.4	605.3
4 1937 (13 oblast)	-	1612.2	668.5	531.1	123.2	791.7
5 1937 (28 oblast)	1806.6	1768.1	678.7	664.8	154.2	832.9

Notes: All data is taken from Nesmii, 1938, op.cit., pp 100-103, and Nesmii, 1940, op.cit., pp 58-65.

Line 1: Expenditure data has been computed from percentage change in 1934-35. This may understate the actual level of expenditure in 1934, since the percentage change referred to 8-oblast data, whereas the figure used as a base (R 1043.5) was for 13 oblasts.

Lines 2-5: Figures in columns 1 and 2 are those actually quoted in the sources listed. Figures in columns 3 and 4 are computed from percentage changes using the 1937 data as a base. Figures in column 4 of lines 1 and 2 are not directly related, because data in line 1 was taken from general percentage changes which differed slightly from those including foodstuffs (Nesmii, 1940, op.cit., pp 62-63). No explanation for the differences in these percentages is given by Nesmii, but it does mean that the data for expenditure on manufactured goods is the higher of the two lots of figures implied in the sources.

Column 5, lines 1-5: This is based on a constant 23.2 per cent of expenditure on agricultural products - the percentage of expenditure on agricultural products taken up by purchases of flour and groats in 1928 (see L Litoshenko, E Khotkevich, "Sezonost' denezhnogo oborota krest'yan-shikh khozyaistv," SO No 2, 1929, p4). It is assumed that the data on expenditure on manufactured goods included processed agricultural products,

but not grain products - although this is not clear from our sources. In the absence of other data this is regarded as a second-best solution, but it is accepted that it could introduce an error in the expenditure comparisons.

Appendix Table J2

Purchases of Manufactured Goods and Processed Agricultural Products in Socialised Trade Made by Collective Farm Members, 1934-37 (rubles/household)

Year and oblasts studied		Purchases of manufactured goods and processed agricultural products
1	1934 (8 oblast)	340.8
2	1935 (13 oblast)	386.9
3	1936 (13 oblast)	521.2
4	1937 (13 oblast)	667.4
5	1937 (28 oblast)	702.1

Notes:

The figures were calculated by taking the percentage of purchases of manufactured goods that were made in state and co-operative trade (given in Nesmii, 1940, op.cit., p65) and applying these to the totals given in column 6 of Appendix Table J1. Thus, in the case of line 2 above the figure was arrived at by taking 81.5 per cent of R 474.7; for line 3 - 86.1 per cent of R 605.3; and for lines 4 and 5 - 84.3 per cent of R 791.7 and R 832.9 respectively. In the case of line 1 above, the percentage for 1935 (81.5%) was applied to R 418.2. It is accepted that this could overstate the percentage of purchases made in state and co-operative trade, since this was a period of extensive rationing and it is likely that the collective farm members made a greater proportion of their purchases of manufactured goods through private channels. This appears to be confirmed by the percentages for 1936 and 1937 which were both higher than that for 1935 (when the dismantling of the rationing system was beginning). Unfortunately, data limitations do not enable us to make a reasonable independent estimate of this, so the 1935 percentage has been applied unchanged.

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